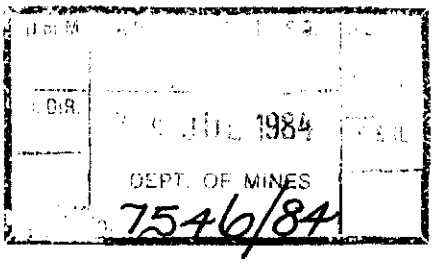
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THE SHELL COMPANY OF AUSTRALIA LIMITED

(INCORPORATED IN VICTORIA)

AND

INDUSTRIAL AND MINING INVESTIGATIONS PTY. LTD.

(INCORPORATED IN THE A.C.T.)

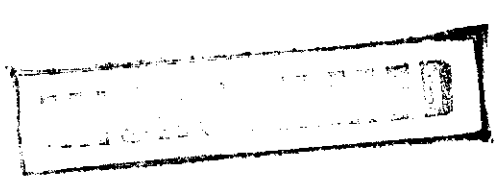
EXPLORATION LICENCE EL 5/61

TASMANIA

REPORT ON AREAS TO BE RELINQUISHED

24th AUGUST, 1984





CEPR 16/84

July, 1984

ktefb7842

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ENCLOSURES

Enclosure 1 - Proposed relinquishment areas

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Appendix 1 - Borehole lithological descriptions (microfiche)

1. INTRODUCTION

Exploration Licence (EL) 5/61 was granted for an area measuring 775 km² on 24 August, 1961. This licence was originally issued to Ernest Roy Hudson and was transferred under Section 15C(10) of the Mining Act, 1929 to Industrial and Mining Investigations Pty. Ltd. (IMI) on 16 January, 1963. The latest transfer to the Shell Company of Australia Limited and IMI took effect on 31 August, 1981.

The conditions governing exploration licences, which were introduced on 1 July, 1982, required a reduction of EL 5/61 to 250 km² within two years. Accordingly, a number of portions have been selected which are to be relinquished from the original licence area so that the remaining area can be reduced to the required maximum size. The location of the portions to be relinquished is shown on Enclosure 1.

It should be noted that the boundaries of the relinquishment portion related to the previously exempt area SR 32/81 have been made to conform to the Australian metric grid, as decided during a meeting at the Mines Department on 11 July, 1984.

This report provides exploration details which have been collected from the relinquished portions. Summarised information of the 16 boreholes drilled by the joint venturers in these portions is listed in Table 1 and all available analytical data on core samples are presented in Table 2. Complete borehole descriptions are given in Appendix 1 and prints of wireline logs are included in Enclosure 2.

THE SHELL COMPANY OF AUSTRALIA LTD.

GENERAL BOREHOLE DATA SUMMARY

STATE TASMANIA
BASIN TASMANIA
PROSPECT GRAY

GRAY

BOREHOLE NAME	TYPE	DATA SOURCE	(AM GRID) EASTING M	NORTHING M	ELEVATION MSL	DATE DRILLING COMMENCED	TOTAL DRILL DAYS	TOTAL DRILLED DEPTH	HOLE SIZE MM	CORE SIZE MM	WATER-LEVEL INIT M	WATER-LEVEL STAND M	DRILL FLUID	DEPTH WIRELINE LOGGED	INFORMATION AVAILABLE S	L	A	W	T
GY 8	CORE	SCOA	601,700	5,360,400	300.00	11/ 9/78	9	265.50							Y	Y	Y	N	N
GY 13	CORE	SCOA	596,100	5,386,800	685.00	21/10/78	9	457.60							N	Y	N	N	N
GY 47	CORE	SCOA	599,449	5,391,050	336.57	28/ 5/81	4	124.50	96.1	47.6				124.27	Y	Y	Y	Y	Y
GY 57	CHIP	SCOA	596,977	5,394,387	246.55	17/11/81	1	30.00	139.6		4.7	1.00	X	29.00	N	Y	N	Y	N
GY 66	CHIP	SCOA	593,935	5,391,966	295.42	18/11/81	1	49.00	139.6		17.0	9.60	X	48.00	N	Y	N	Y	N
GY 69	CHIP	SCOA	592,744	5,391,764	303.60	19/11/81	1	42.00	139.6		11.0	4.10	X	37.00	N	Y	N	Y	N
GY 71	CHIP	SCOA	592,205	5,393,183	257.76	19/11/81	1	18.00	139.6		DRY HOLE		X	13.00	N	Y	N	Y	N
GY 72	CHIP	SCOA	591,525	5,393,309	252.84	20/11/81	1	25.00	139.6		DRY HOLE		X	23.00	N	Y	N	Y	N
GY 73	CHIP	SCOA	592,555	5,392,264	278.86	19/11/81	1	18.00	139.6		DRY HOLE		X	14.00	N	Y	N	Y	N
GY 74	CHIP	SCOA	590,847	5,392,720	302.47	20/11/81	1	14.00	139.6		16.0		X	13.75	N	Y	N	Y	N
GY 75	CHIP	SCOA	591,854	5,392,483	274.40	20/11/81	1	30.00	139.6		DRY HOLE		X		N	Y	N	N	N
GY 76	CHIP	SCOA	591,151	5,392,993	271.95	23/11/81	1	36.00	139.6		33.3		X	34.00	N	Y	N	Y	N
GY 89	CHIP	SCOA	599,259	5,392,124	262.48	25/11/81	1	12.00	139.6		5.0		X	10.00	N	Y	N	Y	N
GY 91	CHIP	SCOA	599,039	5,391,611	270.35	25/11/81	1	24.00	139.6		8.0	0.00	X	23.00	N	Y	N	Y	N
GY 92	CHIP	SCOA	599,235	5,393,155	261.05	25/11/81	1	12.00	139.6		5.0		X		N	Y	N	N	N
GY 99	CORE	SCOA	599,373	5,391,807	266.54	2/12/81	1	18.63	75.7	45.1			A		Y	Y	Y	N	N

LEGEND

BOREHOLE TYPE

CHIP CHIP HOLE
CORE CORE HOLE
BORE WATER BORE
SHAFT SHAFT
REDR REDRILL
REVS REVERSE CIRC

INFORMATION AVAILABLE

S SAMPLES
L LITHOLOGICAL DESCRIPTION
A ANALYSES
W WIRELINE LOGS
T GEOTECHNICAL DATA
(Y YES N NO)

UNIT

MM MILLIMETRES
M METRES

DRILLING FLUID

X AIR
D WATER INJECTION WITH DETERGENT
A FRESH WATER
O MUD
M BENTONITIC MUD
B BRAN
Y OTHERS

WATER LEVEL

INIT - WATER LEVEL AT THE TIME OF FIRST INTERSECTION
STAND - WATER LEVEL AT THE TIME OF PETROPHYSICAL WIRELINE LOGGING

COLLAR ELEVATION REFERENCE

MSL METRES ABOVE SEA LEVEL

DATA SOURCE

SCOA SHELL COMPANY OF AUSTRALIA LTD.

033

387004

2. DESCRIPTION OF RELINQUISHED AREAS

The relinquished area may be divided into four major blocks:

2.1 North Block, comprising

- The Mt. Nicholas Deposit, over which the joint venturers intend to maintain tenure through application for the granting of a mining lease. A portion on the southern side of the mountain has been retained. Part of this area will be covered by mining and easement leases at a later stage when the location of surface facilities is more accurately known.

- The Cornwall Coal Co. mining leases. Although rental has been paid for those portions of Exploration Licence 5/61 that cover this pre-existing mining lease no investigations of this area have been conducted by Shell/IMI during their tenure.

- The margins of the Harefield Deposit. Fourteen holes have been drilled outside the retained portions of this deposit. Data Summaries, lithological descriptions and analytical results for the two sampled holes (GY 47 and GY 99) and copies of all geophysical downhole logs run in these holes are attached. It is evident from this information that no coal of economic potential exists in the relinquished margin of this deposit.

- The northernmost parts of EL 5/61, its eastern edge between the Mt. Elephant Road and Seymour and an area south of the township of St. Marys all comprise strata predominantly older than the coal bearing Upper Parmeener Super Group and as such have no economic potential. Exploration within these areas has been restricted to reconnaissance mapping to confirm published work (McNeil, 1965). As these investigations did not alter existing interpretations, further elaboration in this report is considered superfluous.

2.2 State Reserve 32/81

All drilling and geophysical surveys in this area were conducted by the Department of Mines after exempting this area from EL 5/61. The decision

not to re-apply for this area has been based on an assessment of Department of Mines data. Also included in this relinquished area are a number of small blocks abutting the former State Reserve. These contain one hole GY 13, information for which is attached.

2.3 South Block

Only one Shell hole (GY 8) has been drilled in the southern third of EL 5/61, which covers an areas of 250 km². Details of this hole are also attached. It is possible that this area contains economic coal resources, the level of exploration being insufficient to determine this with any confidence. The area is being relinquished in line with the conditions of tenure for EL 5/61, requiring a reduction of total licence area to 250 km².

2.4 Mt. Peter, Mt. Paul

Forming a separate block of 45 km² on the northern edge of the Freycinet Peninsula this area was examined in detail by Shell in 1982 (CEPR 25/82). As no further work has been carried out in this area the above report serves as a relinquishment document for the Mt. Peter and Mt. Paul section of EL 5/61.

TABLE 2

Analytical Results

GY 8

GY 47

GY 99

Point Load Test Results

GY 47

FORM 1

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

1 of 1

COAL ANALYSIS

Report No. 04/1390

Date 9.1.79

Authorisation Order No. 48605

Client THE SHELL COMPANY OF AUSTRALIA LIMITED

Report to Mr. N.H. Kempton, 155 William St., MELBOURNE

Mr. D.A. Taylor, 260 Macquarie St, HOBART

Sample Details	GY8/1 Cum. F1.70	GY8/1 Raw Coal		
As Received Basis Total Moisture %				
As Analysed Basis				
Moisture %	2.9			
Ash %	22.5			
Volatile Matter %	28.4			
Fixed Carbon %	46.2			
Sulphur %	0.47			
Chlorine %				
Phosphorus %				
Specific Energy MJ/kg	24.540			
Crucible Swelling No.				
Gray-King Coke Type				
Relative Density		1.62		

Copies have been sent to

Determinations carried out in Duplicate
Analysed in accordance with BS1016

Sampled by

THIS LABORATORY IS REGISTERED BY THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES, AUSTRALIA. THE TESTS REPORTED HEREIN HAVE BEEN PERFORMED IN ACCORDANCE WITH ITS TERMS OF REGISTRATION. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL.

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
Bellambi Laboratory

Amended Copy

FORM 11

1 of 1

ANALYSIS AND TESTING REPORT

Report No. 04/1280

Date 2.11.78

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

Authorisation Order No. 48605

Client THE SHELL COMPANY OF AUSTRALIA LIMITED

Report to Mr. N.H. Kempton, 155 William St., MELBOURNE

Mr. D.A. Taylor, 260 Macquarie St., HOBART

PRELIMINARY ANALYSIS OF SAMPLES FROM HOLE GY8

Sample GY8/1

Relative Density = 1.62

Raw Coal Ash = 38.4%

Float & Sink Analysis

Relative Density Fraction	Fractional % Mass	Fractional % Ash	Cumulative % Mass	Cumulative % Ash
F1.50	42.6	16.6	42.6	16.6
1.50 - 1.70	18.9	35.3	61.5	22.3
1.70 - 2.00	17.7	58.9	79.2	28.3
S2.00	20.8	77.3	100.0	38.5

Calculated Ash of Total Sample = 38.5%

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.

FORM 3

COAL ANALYSIS

Report No. 04/3592

Date 18/9/81

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

Authorisation Order No. 43454

Client SHELL COMPANY OF AUSTRALIA LIMITED.

Report to Mr. W.H. Koppe.

Sample Details		47A20	
As Received Basis Total Moisture	%		
As Analysed Basis			
Moisture	%	5.5	
Ash	%	21.9	
Volatile Matter	%	22.0	
Fixed Carbon	%	50.6	
Sulphur	%	0.30	
Chlorine	%	0.08	
Phosphorus	%		
Specific Energy	MJ/kg.	23.730	
Fusibility Temperatures			
Deformation	°C	1490	
Spherical	°C	>1600	
Hemisphere	°C	>1600	
Flow	°C	>1600	

Copies have been sent to

Determinations carried out in Duplicate
Analysed in accordance with BS1016

Sampled by.....

NATA

THIS LABORATORY IS REGISTERED BY THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES, AUSTRALIA. THE TESTS REPORTED HEREIN HAVE BEEN PERFORMED IN ACCORDANCE WITH ITS TERMS OF REGISTRATION. THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL.

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
Bellambi Laboratory

FORM 2

COAL ANALYSIS

Report No. 04/3592

Date 18/9/81

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD
P.O. Box 83
North Ryde, N.S.W
2113

Authorisation Order No. 43454

Origin SHELL COMPANY OF AUSTRALIA LIMITED.

Report to Mr. W.H. Koppe.

Sample Details		47A20	Sample Details		47A20
D.A.F. Basis			Silicon as SiO_2	%	64.9
Carbon	%	81.5	Aluminium as Al_2O_3	%	27.3
Hydrogen	%	4.40	Iron as Fe_2O_3	%	2.44
Nitrogen	%	1.45	Calcium as CaO	%	0.46
Sulphur	%	0.41	Magnesium as MgO	%	0.35
Oxygen	%	12.24	Titanium as TiO_2	%	1.48
Carbonates (CO_2)	%	0.42	Sodium as Na_2O	%	0.17
A.A. Basis			Potassium as K_2O	%	0.28
Forms of Sulphur			Phosphorus as P_2O_5	%	0.03
Pyritic	%		Manganese as Mn_3O_4	%	0.21
Sulphate	%		Sulphur as SO_3	%	0.56
Organic	%				
Hardgrove Grindability Index (AS1038.20 1981)		55 (+600 µm 57%)			

Copies have been sent to

Determinations carried out in Duplicate
Analysed in accordance with BS1016

Sampled by.....

Ultimate analysis carried out at Central Laboratory.
& Hardgrove Grindability " " " "

NATA THIS LABORATORY IS REGISTERED BY THE NATIONAL ASSOCIATION OF TESTING AUTHORITIES, AUSTRALIA. THE TESTS REPORTED HEREIN HAVE BEEN PERFORMED IN ACCORDANCE WITH ITS TERMS OF REGISTRATION.

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD
Bellambi Laboratory

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

ANALYSIS AND TESTING REPORT

Report No. 04/3478

Date 19/6/81

Authorisation Order No. 43454

Client THE SHELL COMPANY OF AUSTRALIA LTD.

Report to Mr. W.H. Koppe.

Sample No. GY47A01

Relative Density of Raw Coal - 2.17

Ash - 71.2%

Sample No. GY47A02

Relative Density Fraction	Fractional % Mass	Fractional % Ash	Cumulative % Mass	Cumulative % Ash
F1.60	22.2	12.1	22.2	12.1
1.60 - 1.70	21.9	33.0	44.1	22.5
1.70 - 1.80	9.1	46.2	53.2	26.5
S1.80	46.8	56.8	100.0	40.7

Relative Density of Raw Coal - 1.69

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
Bellambi Laboratory

387013

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

ANALYSIS AND TESTING REPORT

Report No. 04/3478

Date 19/6/81

Authorisation Order No. 43454

Client THE SHELL COMPANY OF AUSTRALIA LTD.

Report to Mr. W.H. Koppe.

Sample No. GY47A03

Relative Density Fraction	Fractional % Mass	Ash	Cumulative % Mass	Ash
F1.60	42.8	18.0	42.8	18.0
1.60 - 1.70	16.5	34.5	59.3	22.6
1.70 - 1.80	7.7	45.5	67.0	25.2
S1.80	33.0	65.1	100.0	38.4

Relative Density of Raw Coal - 1.64

Sample No. GY47A04

Relative Density Fraction	Fractional % Mass	Ash	Cumulative % Mass	Ash
F1.60	72.1	15.2	72.1	15.2
1.60 - 1.70	9.2	37.0	81.3	17.7
1.70 - 1.80	3.1	41.1	84.4	18.5
S1.80	15.6	73.3	100.0	27.1

Relative Density of Raw Coal - 1.49

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
Bellambi Laboratory

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

ANALYSIS AND TESTING REPORT

Report No. 04/3659

Date 24/9/81

Authorisation Order No. 43454

Client SHELL COMPANY OF AUSTRALIA LTD.

Report to Mr. W.H. Koppe, Head of Coal Exploration - Southern States,
Shell Company of Australia Ltd.,
P.O. Box 872K, MELBOURNE. VIC 3001

FLOAT AND SINK ANALYSIS OF SAMPLES CRUSHED TO -25.0 MM

Sample No. GY47A05

Relative Density Fraction	Fractional % Mass	Fractional % Ash	Cumulative % Mass	Cumulative % Ash
F1.60	65.3	18.8	65.3	18.8
1.60 - 1.70	10.4	36.3	75.7	21.2
1.70 - 1.80	6.8	45.9	82.5	23.2
S1.80	17.5	68.0	100.0	31.1

Relative Density of Raw Coal - 1.60

Sample No. GY47A06

Relative Density Fraction	Fractional % Mass	Fractional % Ash	Cumulative % Mass	Cumulative % Ash
F1.60	0.5	26.0	0.5	26.0
1.60 - 1.70	Nil	-	-	-
1.70 - 1.80	Nil	-	-	-
S1.80	99.5	77.8	100.0	77.5

Relative Density of Raw Coal - 2.27

Sample No. GY47A07

Relative Density Fraction	Fractional % Mass	Fractional % Ash	Cumulative % Mass	Cumulative % Ash
F1.60	27.6	22.8	27.6	22.8
1.60 - 1.70	9.2	31.7	36.8	25.0
1.70 - 1.80	16.0	38.8	52.8	29.2
S1.80	47.2	60.3	100.0	43.9

Relative Density of Raw Coal - 1.82

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
Bellambi Laboratory

387015

FORM 11

AUSTRALIAN COAL INDUSTRY RESEARCH LABORATORIES LTD.
P.O. Box 83
North Ryde, N.S.W.
2113

ANALYSIS AND TESTING REPORT

Report No. 04/3845

Date 29/12/81

Authorisation P.W. Sansom - Letter of 8/12/81

Client THE SHELL COMPANY OF AUSTRALIA LTD.

Report to Mr. W. Koppe.

Sample No. 99A01

Relative Density Fraction	Fractional % Mass	Ash	Cumulative % Mass	Ash
F1.60	33.9	25.2	33.9	25.2
1.60 - 1.70	23.6	37.6	57.5	30.3
1.70 - 1.80	13.0	46.0	70.5	33.2
S1.80	29.5	64.0	100.0	42.3

Relative Density of Raw Coal - 1.72

KEY FOR POINT LOAD TEST DATA

TYPE OF TEST

PLA	AXIAL
PLR	DIAMETRICAL

FAILURE TYPE

NF	NORMAL TENSILE FAILURE
PF	PARTIAL FAILURE

PRIMARY LITHOLOGY

SS	SANDSTONE
SC	COARSE GRAINED SANDSTONE
SM	MEDIUM GRAINED SANDSTONE
SF	FINE GRAINED SANDSTONE
ST	SILTSTONE
MS	MUDSTONE
MS	MUDSTONE
CM	CARBONACEOUS MUDSTONE
CS	CARBONACEOUS SHALE
CO	COAL
C1-C3	BRIGHT COAL
C4	BANDED COAL
C5-C8	DULL COAL
M1-M2	MID LUSTROUS COAL
TO	TONSTEIN
DO	DOLERITE

QUALIFYING LITHOLOGY

CO	COALY
CS	CARBONACEOUS
LS	CALCAREOUS
LT	LITHIC
SA	ARENACEOUS
SA	ARENACEOUS
SL	SILTY
CL	ARGILLACEOUS
FO	FOSSILIFEROUS
BR	BRECCIATED
CR	CINDERED
VC	VERY COARSE GRAINED
MC	MEDIUM TO COARSE GRAINED
MF	FINE TO MEDIUM GRAINED
VF	VERY FINE GRAINED
VA	BANDS
LM	LAMINAE
MP	WITH MUD PELLETS
WX	SLIGHTLY WEATHERED
WE	MODERATELY WEATHERED
WH	HIGHLY WEATHERED

POINT LOAD TEST RESULTS

BOREHOLE CY47

DEPTH (M)	THICKNESS (CM)	TYPE	LOAD (KN)	IS(50) MN/M2	LITHOLOGY	FAILURE TYPE	CONDITION
8.02	5.0	PLA	0.1	0.04	SM	NF	MOIST
13.30	4.8	PLA	1.7	0.72	SM	NF	MOIST
20.10	5.0	PLA	0.2	0.08	SSMC	NF	MOIST
22.75	4.8	PLA	1.2	0.51	SF	NF	DRY
24.38	4.9	PLA	0.1	0.04	C7	NF	DRY
25.39	5.3	PLA	0.0	0.01	MS	PF	DRY
29.41	4.8	PLA	0.1	0.04	ST	NF	DRY
33.38	5.0	PLA	0.2	0.08	SC	NF	MOIST
34.55	5.0	PLA	0.1	0.04	SM	NF	MOIST
38.15	5.3	PLA	0.1	0.03	SM	PF	MOIST
41.69	4.7	PLA	0.0	0.02	SM	NF	MOIST
43.79	5.0	PLA	0.0	0.02	SC	NF	MOIST
49.45	5.1	PLA	0.1	0.03	SM	NF	MOIST
52.45	5.4	PLA	0.1	0.03	SM	NF	MOIST
53.58	5.6	PLA	0.0	0.01	SM	NF	MOIST
57.36	5.6	PLA	0.1	0.04	SM	NF	MOIST
86.38	4.0	PLA	0.5	0.28	ST	NF	DRY
86.94	4.5	PLA	1.6	0.79	MS	NF	DRY
91.00	5.3	PLA	0.3	0.17	MS	PF	DRY
91.46	4.5	PLA	0.3	0.14	MS	NF	DRY
92.00	4.5	PLA	4.3	1.95	MS	NF	DRY
92.68	4.9	PLA	2.5	1.01	MS	NF	DRY
93.00	4.6	PLA	0.5	0.20	SFST	NF	DRY
80.12	5.6	PLA	0.5	0.16	SM	PF	DRY
81.16	5.5	PLA	3.9	1.44	SSMF	NF	DRY
82.55	5.5	PLA	0.6	0.21	STCS	PF	DRY
83.09	4.8	PLA	0.3	0.13	STCS	NF	DRY
83.97	4.8	PLA	0.8	0.35	SF/SK	PF	DRY
84.63	5.5	PLA	4.5	1.80	SF/LM	PF	DRY
85.20	4.8	PLA	4.8	2.05	SMCS	NF	DRY
86.03	5.0	PLA	0.3	0.14	MSST	PF	DRY

387017

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THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

RELINQUISHMENT REPORT
24 AUGUST, 1984.
CEPR 16/84

APPENDIX 1.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 8

HOLE TYPE	CORE
EASTING	601,700 M AM GRID
NORTHING	5,360,400 M AM GRID
ELEVATION	300.00 M
TOTAL DEPTH DRILLED	265.50 M
DRILLING STARTED	11/ 9/78
DRILLING TIME	9 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
51.40	51.40			100% DOLERITE	SCREE.
53.40	2.00	100		100% SHALE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.52	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.60	0.08	100		100% CARBONACEOUS SHALE	COALY, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.98	0.38	100		100% SHALE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
54.92	0.94	100		100% SHALE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
57.14	2.22	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
57.37	0.23	100		100% SILTSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
57.55	0.18	100		100% SHALE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
57.56	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
57.57	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK.
57.68	0.11	100		100% COAL, HEAVY DULL	
57.85	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
58.26	0.41	100		100% SILTSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
58.32	0.06	100		100% CLAYSTONE	BROWN, UNWEATHERED, WEAK ROCK.
58.41	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
58.48	0.07	100		100% CLAYSTONE	FISSILE, BROWN, UNWEATHERED, WEAK ROCK.
58.60	0.12	100		100% CARBONACEOUS SHALE	COALY, DARK GREY, UNWEATHERED, WEAK ROCK.
58.80	0.20	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
65.84	7.04	100		100% SILTSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.15	2.31	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
68.33	0.18	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.12	3.79	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
72.16	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
75.96	3.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
76.19	0.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
76.26	0.07	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH TROUGH CROSS BEDDING.
76.76	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
76.85	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
77.32	0.47	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
77.48	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
77.68	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
82.50	4.82	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
82.54	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
82.60	0.06	100		100% MUDSTONE	FISSILE, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
82.61	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
82.68	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
82.82	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
82.84	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
82.87	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK.
82.94	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
83.14	0.20	100		100% SILTSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.19	0.05	100		100% CLAYSTONE	COALY, BUFF, VERY WEAK ROCK.
83.27	0.08	100		100% MUDSTONE	COALY, BANDS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
83.52	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.35	0.83	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
84.53	0.18	100		100% MUDSTONE	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
84.76	0.23	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
85.74	0.98	100		100% MUDSTONE	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
85.94	0.20	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
86.93	0.99	20		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY.
87.09	0.16	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
87.49	0.40	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
87.64	0.15	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
87.69	0.05	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, WEAK ROCK.
87.95	0.26	100		100% MUDSTONE	CARBONACEOUS, BLACK.
88.38	0.43	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
88.55	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
89.00	0.45	0		CORE LOSS	
89.15	0.15	100		100% MUDSTONE	CARPONACEOUS, BADLY BROKEN, BLACK.
89.24	0.09	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.39	0.15	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
89.63	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.74	0.11	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.86	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.00	0.14	0		CORE LOSS	
90.45	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED.
90.65	0.20	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
91.15	0.50	100		100% MUDSTONE	CARBONACEOUS, BLACK.
91.30	0.15	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
91.86	0.56	100		100% MUDSTONE	CARBONACEOUS, BLACK.

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92.02	0.16	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
94.20	2.18	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
94.68	0.48	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
94.75	0.07	100		100% SHALE	BADLY BROKEN, GREY.
94.93	0.18	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
95.49	0.56	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
98.44	2.95	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	COALY, LENSES, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
103.36	4.92	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
104.05	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
105.70	1.65	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
105.84	0.14	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
105.85	0.01	100		100% CLAYSTONE	BUFF, SOFT.
105.87	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.93	0.06	100		100% COAL, HEAVY DULL	
106.02	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
106.14	0.12	100		100% COAL, INTERBANDED DULL AND BRIGHT	MUDSTONE, LAMINAE, WITH CALCITE ON CLEAT.
106.17	0.03	100		100% MUDSTONE	SHALY, CARBONACEOUS, GREY-BROWN, WEAK ROCK.
106.31	0.14	100		100% MUDSTONE	GREY, WEAK ROCK.
106.35	0.04	100		100% SHALE	GREY, FIRM.
106.36	0.01	100		100% SHALE	LIGHT BROWN, FIRM.
106.50	0.14	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
106.70	0.20	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
109.20	2.50	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.25	0.05	100		100% CLAYSTONE	LIGHT BROWN, SOFT.
109.31	0.06	100		100% CLAYSTONE	FISSILE, BROWN, SOFT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
109.37	0.06	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, SOFT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
109.49	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
109.51	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
109.56	0.05	100		100% CLAYSTONE	BROWN, SOFT.
109.60	0.04	100		100% MUDSTONE	BROWN, WEAK ROCK.
109.98	0.38	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BLACK. SILTSTONE, BROWN. MODERATELY WEAK ROCK, THINLY BEDDED.
110.14	0.16	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
110.19	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
110.39	0.20	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
110.65	0.26	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY-BROWN.
112.20	1.55	100		100% SANDSTONE,FINE GRAINED	GREY, VERY THINLY BEDDED, WITH LOAD CASTS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
114.85	2.65	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
115.83	0.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
117.85	2.02	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
118.40	0.55	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
121.60	3.20	100		100% SANDSTONE,COARSE GRAINED	FRIABLE, LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
122.20	0.60	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
122.85	0.65	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
123.06	0.21	100		100% MUDSTONE	GREY, VERY WEAK ROCK.

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126.00	2.94	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.45	2.45	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MOSERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.20	1.75	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.34	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
130.55	0.21	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.74	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
133.38	2.64	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FISSILE, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
134.00	0.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
137.00	3.00	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
137.35	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
137.70	0.35	100		100% CLAYSTONE	BADLY BROKEN, GREY, MODERATELY STRONG ROCK.
143.30	5.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
144.05	0.75	100		100% SILTSTONE	FRIABLE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
144.50	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
144.83	0.33	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
145.55	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
147.20	1.65	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FISSILE, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

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149.70	2.50	100		100% SANDSTONE,MEDIUM GRAINED	FRIABLE, LITHIC, LIGHT GREY, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
150.05	0.35			100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
150.45	0.40			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
150.65	0.20			100% MUDSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK.
150.90	0.25			100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, VERY WEAK ROCK.
152.04	1.14		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.14	0.10		1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
152.32	0.18		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.42	0.10		1	100% MUDSTONE	SILTSTONE, COALY, DARK BROWN, VERY WEAK ROCK.
152.62	0.20		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.73	0.11		1	100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
152.75	0.02		1	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
152.85	0.10		1	100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
153.04	0.19			100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
153.17	0.13			100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK.
153.40	0.23			100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
156.68	3.28			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
157.84	1.16			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
158.43	0.59			70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
161.64	3.21			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
162.12	0.48			100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
162.48	0.36			100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
162.53	0.05			100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
162.71	0.18			100% MUDSTONE	CARBONACEOUS, FRIABLE, BLACK, VERY WEAK ROCK.

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162.80	0.09			100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
162.87	0.07			100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
163.24	0.37			100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
163.66	0.42			100% MUDSTONE	CARBONACEOUS, FRIABLE, BLACK, VERY WEAK ROCK.
164.44	0.78	100		100% SHALE	GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
165.55	1.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK.
170.03	4.48	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
170.92	0.89	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
175.90	4.98	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS.
176.03	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
176.11	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.18	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
176.19	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.21	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK.
176.27	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
176.43	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
177.58	1.15	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, THICKLY LAMINATED, WITH PLANT REMAINS.
177.80	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
178.36	0.56	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
179.00	0.64	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
179.48	0.48	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, THICKLY LAMINATED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
181.81	2.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
181.83	0.02	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
181.96	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
182.18	0.22	100		100% SILTSTONE	CARBONACEOUS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
182.40	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
183.52	1.12	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
187.50	3.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
188.37	0.87	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
188.68	0.31	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.37	2.69	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.51	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
191.84	0.33	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
192.32	0.48	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
193.18	0.86	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
196.06	2.88	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
196.31	0.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
196.45	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
198.10	1.65	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
198.83	0.72	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
199.52	0.69	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
200.05	0.53	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
208.45	8.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
209.75	1.30	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK.
209.87	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
210.71	0.84	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
211.20	0.49	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
211.55	0.35	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.00	0.45	100		100% MUDSTONE	SILTSTONE, FRIABLE, DARK GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
212.20	0.20	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
212.43	0.23	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
213.15	0.72	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
213.56	0.41	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
214.02	0.46	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
214.44	0.42	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, WEAK ROCK.
214.91	0.47	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
214.98	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
215.35	0.37	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
215.51	0.16	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, WEAK ROCK.
215.75	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
216.02	0.27	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
216.16	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, WITH PLANT REMAINS.
217.23	1.07	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
217.53	0.30	100		100% SHALE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
218.54	1.01	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
219.67	1.13	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES,
222.07	2.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
222.69	0.62	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
223.20	0.51	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
223.46	0.26	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
223.88	0.42	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
224.02	0.14	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
224.30	0.28	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
224.96	0.66	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
225.17	0.21	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
225.28	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
225.51	0.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
226.88	1.37	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
227.18	0.30	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
227.86	0.68	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
228.40	0.54	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
228.51	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
228.72	0.21	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
228.92	0.20	100		100% SILTSTONE	FISSILE, BADLY BROKEN, GREY, VERY WEAK ROCK.
229.27	0.35	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
230.78	1.51	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
230.80	0.02	100		100% COAL, HEAVY DULL	WITH PYRITE ON CLEAT.
230.86	0.06	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
231.36	0.50	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK.
231.65	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
231.72	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
232.07	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING.
232.09	0.02	100		100% COAL, DULL	
232.18	0.09	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
233.50	1.32	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, GREY, WITH MICA, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
234.25	0.75	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
234.45	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
235.23	0.78	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, MODERATELY WEAK ROCK.
235.65	0.42	100		100% SANDSTONE,COARSE GRAINED	FISSILE, LIGHT GREY, WEAK ROCK.
237.00	1.35	100		100% SANDSTONE	MED.-COARSE GRAINED, QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
237.88	0.88	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, WITH FRAGMENTS OF FELDSPAR, WEAK ROCK, WITH MUD PELLETS.
239.56	1.68	100		100% SANDSTONE	MED.-COARSE GRAINED, QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
246.76	7.20	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
247.40	0.64	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
254.70	7.30	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
257.44	2.74	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
257.70	0.26	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK.
260.54	2.84	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
260.67	0.13	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
260.85	0.18	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.05	0.20	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.65	0.60	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.75	0.10	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.22	0.47	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.31	0.09	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.56	0.25	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.64	0.08	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, WITH FRAGMENTS OF FELDSPAR, MODERATELY STRONG ROCK.
264.33	1.69	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
265.50	1.17	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	150.65 - 152.85 M	2.20 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 13

HOLE TYPE	CORE	
EASTING	596,100 M	GRID
NORTHING	5,386,800 M	GRID
ELEVATION	685.00 M	
TOTAL DEPTH DRILLED	457.60 M	
DRILLING STARTED	21/10/78	
DRILLING TIME	9 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.55	4.55	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
5.20	0.65	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
24.85	19.65	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 66 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
25.45	0.60	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.50	0.05	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.70	0.20	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.73	0.03	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
26.35	0.62	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
41.50	15.15	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
42.50	1.00	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
50.00	7.50	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
76.60	26.60	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
103.60	27.00	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
127.60	24.00	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
171.50	43.90	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
183.00	11.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS AND CLAY ON JOINTS, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
250.00	67.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
252.00	2.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
265.60	13.60	100		100% DOLERITE	MEDIUM GRAINED, GREY, MODERATELY STRONG ROCK.
298.00	32.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
299.00	1.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
307.20	8.20	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
308.60	1.40	100		100% DOLERITE	CHLORITIC, DARK GREEN, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
330.00	21.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
335.60	5.60	100		100% DOLERITE	MED.-COARSE GRAINED, CHLORITIC, GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
351.50	15.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
352.50	1.00	100		100% DOLERITE	MEDIUM GRAINED, CHLORITIC, GREEN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
364.00	11.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
385.00	21.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK, VERY WIDELY SPACED JOINTS.
391.50	6.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
415.60	26.10	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, NON-PLANAR DISCONTINUITIES, .
442.00	26.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS.
457.60	15.60	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 47

HOLE TYPE	CORE	
EASTING	599,449 M	GRID
NORTHING	5,391,050 M	GRID
ELEVATION	336.57 M	
TOTAL DEPTH DRILLED	124.50 M	
DRILLING STARTED	28/ 5/81	
DRILLING TIME	4 DAYS	
CORE SIZE	47.6 MM	
HOLE SIZE	96.1 MM	
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.37	0.37	50		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, YELLOW-BROWN, MODERATELY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
0.45	0.08	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
0.68	0.23	100	47T08	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
0.83	0.15	100	47T09	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
1.98	1.15	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
2.15	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
2.31	0.16	100	47T10	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
2.84	0.53	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
2.97	0.13	100	47T11	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
3.50	0.53	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
3.67	0.17	100	47T12	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
4.07	0.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
4.67	0.60	80		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
5.27	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
5.59	0.32	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
5.63	0.04	50		90% COAL 10% MUDSTONE	BLACK. LENSES, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CONVOLUTED BEDDING.
6.67	1.04	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
8.36	1.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
8.82	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
10.40	1.58	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
10.82	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
14.31	3.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
15.57	1.26	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	MASSIVE, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
16.16	0.59	100		75% SANDSTONE,MEDIUM GRAINED 15% COAL 10% MUDSTONE	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
16.67	0.51	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
16.83	0.16	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
17.42	0.59	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
17.53	0.11	100		80% COAL 20% SANDSTONE	FRAGMENTS, STREAKS, BLACK. MED.-FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
17.73	0.20	100		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
19.04	1.31	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
19.43	0.39	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
20.15	0.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
20.42	0.27	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
23.88	3.46	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
24.07	0.19	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
24.08	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
24.17	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
24.24	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
24.39	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
24.54	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
24.61	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
25.36	0.75	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, UNWEATHERED, WEAK ROCK.
25.56	0.20	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
26.67	1.11	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, UNWEATHERED, WEAK ROCK.
27.41	0.74	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.50	2.09	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CROSS LAMINATION.
29.69	0.19	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
29.80	0.11	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
30.38	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY STRONG ROCK.
30.53	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
30.91	0.38	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
31.43	0.52	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
31.88	0.45	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
32.72	0.84	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
33.61	0.89	100		90% SANDSTONE,COARSE GRAINED 10% COAL	LITHIC, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
37.63	4.02	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
38.02	0.39	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
38.08	0.06	100		60% SANDSTONE,COARSE GRAINED 40% COAL	COARSE GRAINED, LAMINAE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
41.22	3.14	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
41.83	0.61	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	ORANGE-BROWN. FRAGMENTS, STREAKS, BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.64	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
42.78	0.14	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	ORANGE-BROWN. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
42.87	0.09	100		100% MUDSTONE	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
42.97	0.10	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
43.71	0.74	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
44.11	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
44.77	0.66	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
45.40	0.63	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
45.46	0.06	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
49.13	3.67	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH MUD PELLETS, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.35	0.22	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
49.57	0.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, ORANGE-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
49.87	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
50.09	0.22	100		75% SANDSTONE 25% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
50.63	0.54	100		90% SANDSTONE 5% COAL 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
51.36	0.73	100		100% SANDSTONE	MED.-COARSE GRAINED, ORANGE-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
51.71	0.35	100		100% SANDSTONE	MED.-COARSE GRAINED, ORANGE-BROWN, WITH CALCITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
52.22	0.51	100		100% SANDSTONE	MED.-COARSE GRAINED, ORANGE-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
52.69	0.47	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
53.34	0.65	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
53.44	0.10	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 8 DEG.
57.49	4.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
58.00	0.51	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
58.59	0.59	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
60.25	1.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
60.39	0.14	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 7 DEG.
60.76	0.37	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
60.93	0.17	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
61.60	0.67	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT NON PLANAR.
63.21	1.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
63.27	0.06	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
66.58	3.31	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
69.15	2.57	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
71.72	2.57	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
73.75	2.03	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
74.87	1.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
75.30	0.43	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
77.43	2.13	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
78.91	1.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG., WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 87 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
79.11	0.20	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
79.77	0.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.89	1.12	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
81.01	0.12	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
81.08	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
82.42	1.34	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, BLACK. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH DISTURBED BEDDING.
83.80	1.38	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
83.88	0.08	100		85% COAL, BRIGHT 15% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
83.98	0.10	100		95% MUDSTONE 5% COAL, BRIGHT	GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.04	0.06	100		85% COAL, BRIGHT 15% COAL, DULL WITH NUMEROUS BRIGHT BANDS	LENSES, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
84.27	0.23	100		95% MUDSTONE 5% COAL, BRIGHT	COALY, STREAKS, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
84.35	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
84.70	0.35	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
84.78	0.08	100		60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
84.88	0.10	100	47T01	60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
85.19	0.31	100		60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.34	0.15	100	47T02	60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
85.63	0.29	100		60% MUDSTONE 40% SILTSTONE	COALY, STREAKS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
85.74	0.11	100	47T03	60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
85.97	0.23	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
86.23	0.26	100	47A01	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.49	0.26	100	47A01	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
86.50	0.01	100	47A01	100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E : 250.07 M R.L.	
86.61	0.11	100	47A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.64	0.03	100	47A02	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.73	0.09	100	47A02	100% COAL, MID LUSTROUS	BLACK, WITH FRAGMENTS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
86.76	0.03	100	47A02	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.78	0.02	100	47A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.90	0.12	100	47A03	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.00	0.10	100	47A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.01	0.01	100	47A03	75% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
87.04	0.03	100	47A03	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
87.06	0.02	100	47A03	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BRIGHT COAL, STREAKS, BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
87.15	0.09	0	47A03	CORE LOSS	
87.34	0.19	100	47A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.37	0.03	100	47A03	50% COAL, DULL 50% TONSTEIN	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
87.39	0.02	100	47A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.42	0.03	100	47A03	60% TONSTEIN 40% COAL, DULL	CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
87.46	0.04	100	47A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.48	0.02	100	47A03	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.54	0.06	100	47A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.56	0.02	100	47A03	100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
87.74	0.18	100	47A03	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, WITH FRAGMENTS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
87.76	0.02	100	47A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.83	0.07	100	47A03	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.85	0.02	100	47A03	90% COAL, MID LUSTROUS 10% MUDSTONE	BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
88.02	0.17	100	47A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
88.04	0.02	100	47A03	75% CARBONACEOUS MUDSTONE 25% COAL, BRIGHT	BROWN-BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
88.11	0.07	100	47A04	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
88.13	0.02	100	47A04	90% COAL, INTERBANDED DULL AND BRIGHT 10% MUDSTONE	BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
88.14	0.01	100	47A04	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
88.25	0.11	100	47A04	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
88.32	0.07	100	47A04	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
88.34	0.02	100	47A04	60% TONSTEIN 40% COAL, DULL	BRIGHT COAL, STREAKS, CREAM. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
88.37	0.03	100	47A04	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE E : THICKNESS= 1.87 M; SAMPLED THICKNESS= 1.87 M	
88.78	0.41	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
88.97	0.19	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
89.35	0.38	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
89.51	0.16	100	47P04	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
90.37	0.86	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.72	0.35	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 87 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.82	0.10	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.86	0.04	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
91.33	0.47	100		75% MUDSTONE 20% SANDSTONE,FINE GRAINED 5% SILTSTONE	GREY. INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG.
91.41	0.08	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
91.71	0.30	100		85% MUDSTONE 15% SILTSTONE	GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
91.81	0.10	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
92.45	0.64	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 87 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
92.46	0.01	100		60% CLAYSTONE 40% COAL, HEAVY DULL	COALY, STREAKS, BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
92.75	0.29	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
93.14	0.39	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
93.28	0.14	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
93.74	0.46	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. LAMINAE, INTERCALATIONS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
93.91	0.17	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. LAMINAE, INTERCALATIONS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
94.01	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
94.04	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
94.05	0.01	0		CORE LOSS	
94.06	0.01	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
94.26	0.20	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
94.42	0.16	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
95.06	0.64	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
95.95	0.89	100		60% SANDSTONE,FINE GRAINED 20% MUDSTONE 20% SILTSTONE	LIGHT GREY. BANDS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF : 240.62 M R.L.	
95.97	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
95.98	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.07	0.09	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.08	0.01	100		100% COAL; BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
96.11	0.03	100		100% CLAYSTONE	YELLOW-BROWN, UNWEATHERED, WEAK ROCK.
96.29	0.18	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF : THICKNESS= 0.34 M; SAMPLED THICKNESS= 0.00 M	
96.47	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.92	0.45	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.95	0.03	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
96.98	0.03	100		60% CLAYSTONE 40% COAL, BRIGHT	CREAM. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
96.99	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
97.25	0.26	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
97.37	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
97.94	0.57	100		100% SILTSTONE	GRADING TO, MUDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
98.70	0.76	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
98.89	0.19	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
98.90	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
99.55	0.65	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
100.36	0.81	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
100.46	0.10	100	47705	80% SANDSTONE,FINE GRAINED 20% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
100.54	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.56	0.02	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
100.70	0.14	100	47T06	100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
100.80	0.10	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
			TOP OF : 235.77 M R.L.		
100.88	0.08	100	47A05	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
101.12	0.24	100	47A05	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
101.18	0.06	100	47A05	100% COAL, HEAVY DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
101.20	0.02	100	47A05	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
101.37	0.17	100	47A05	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
101.42	0.05	100	47A05	95% COAL, HEAVY DULL 5% MUDSTONE	BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
101.44	0.02	100	47A05	100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
101.54	0.10	100	47A05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
101.60	0.06	100	47A05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
101.65	0.05	100	47A05	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
			BASE OF : THICKNESS= 0.85 M; SAMPLED THICKNESS= 0.85 M		
101.91	0.26	100	47A06	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
102.02	0.11	100	47T07	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
102.13	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.25	0.12	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
102.27	0.02	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
102.45	0.18	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
102.50	0.05	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
103.89	1.39	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
104.81	0.92	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.17	0.36	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.66	0.49	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
107.67	2.01	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
107.88	0.21	100		100% SILTSTONE	MUDSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
108.00	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.04	0.04	100		100% CLAYSTONE	YELLOW-BROWN, UNWEATHERED, VERY WEAK ROCK.
108.06	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
108.25	0.19	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, JOINTS DIP 45 DEG.
108.37	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.43	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.54	0.11	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	BANDS, BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
108.70	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.15	0.45	100		85% CARBONACEOUS MUDSTONE 15% SILTSTONE	BLACK. CARBONACEOUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.23	0.08	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.36	0.13	100		50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.47	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.75	0.28	100		75% CARBONACEOUS MUDSTONE 25% SANDSTONE,FINE GRAINED	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
109.99	0.24	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.01	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
110.36	0.35	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.57	0.21	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	GREY. GRADING TO, MUDSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
110.59	0.02	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.16	0.57	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
111.19	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.23	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.27	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
111.58	0.31	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.59	0.01	100		100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK.
112.15	0.56	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
112.25	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
112.43	0.18	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
112.67	0.24	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
112.81	0.14	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
112.85	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
113.18	0.33	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
113.41	0.23	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.65	0.24	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
113.84	0.19	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.04	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.32	0.28	100		95% SANDSTONE,FINE GRAINED 5% COAL	CARBONACEOUS, ARKOSIC, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
114.48	0.16	100		100% SANDSTONE,FINE GRAINED	ARKOSIC, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
115.39	0.91	100		100% SILTSTONE	MASSIVE, CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
115.40	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
			TOP OF DALMAYNE F : 221.17 M R.L.		
115.56	0.16	100	47A07	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BROWN-BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
115.75	0.19	0	47A07	CORE LOSS	
115.80	0.05	100	47A07	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.88	0.08	100	47A07	100% COAL, MID LUSTROUS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
115.96	0.08	100	47A07	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
116.02	0.06	100	47A07	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.05	0.03	100	47A07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.19	0.14	100	47A07	100% COAL, MID LUSTROUS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
116.20	0.01	100	47A07	50% MUDSTONE 50% COAL, MID LUSTROUS	BANDS, CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
116.22	0.02	100	47A07	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.34	0.12	100	47A07	100% COAL, DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
116.42	0.08	100	47A07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
116.52	0.10	100	47A07	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE F : THICKNESS= 1.12 M; SAMPLED THICKNESS= 1.12 M	
116.54	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.71	0.17	100		100% SILTSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
119.42	2.71	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	MASSIVE, GREY-BROWN. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
119.52	0.10	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
119.79	0.27	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	MASSIVE, GREY-BROWN. PELLETAL, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
120.56	0.77	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.85	0.29	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. WITH FRAGMENTS OF QUARTZ, UNWEATHERED, MODERATELY WEAK ROCK.
121.20	0.35	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GREY. FRAGMENTS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
121.80	0.60	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
123.80	2.00	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DE	1.87 M	86.50 - 88.37 M	1.87 M
E2	0.00 M	95.95 - 96.29 M	0.34 M
E3	0.85 M	100.80 - 101.65 M	0.85 M
DF	1.12 M	115.40 - 116.52 M	1.12 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
47T08	0.45 - 0.68 M	0.23 M
47T09	0.68 - 0.83 M	0.15 M
47T10	2.15 - 2.31 M	0.16 M
47T11	2.84 - 2.97 M	0.13 M
47T12	3.50 - 3.67 M	0.17 M
47T01	84.78 - 84.88 M	0.10 M
47T02	85.19 - 85.34 M	0.15 M
47T03	85.63 - 85.74 M	0.11 M
47A01	85.97 - 86.50 M	0.53 M
47A02	86.50 - 86.78 M	0.28 M
47A03	86.78 - 88.04 M	1.26 M
47A04	88.04 - 88.37 M	0.33 M
47T04	89.35 - 89.51 M	0.16 M
47T05	100.36 - 100.46 M	0.10 M
47T06	100.56 - 100.70 M	0.14 M
47A05	100.80 - 101.65 M	0.85 M
47A06	101.65 - 101.91 M	0.26 M
47T07	101.91 - 102.02 M	0.11 M
47A07	115.40 - 116.52 M	1.12 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 57

HOLE TYPE	CHIP
EASTING	596,977 M AM GRID
NORTHING	5,394,387 M AM GRID
ELEVATION	246.55 M
TOTAL DEPTH DRILLED	30.00 M
DRILLING STARTED	17/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	4.70 M
WATER LEVEL AT GEOPHYSICAL LOGGING	1.00 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			100% SOIL	BROWN-BLACK, WEATHERED TO SOIL.
2.80	1.80			80% CLAY 20% CLAY	ORANGE-YELLOW. BLACK. WEATHERED TO SOIL.
4.30	1.50			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
4.70	0.40			100% SILT	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
5.00	0.30			100% COAL, DULL	GREY, UNWEATHERED.
6.00	1.00			80% SILT 20% SANDSTONE,FINE GRAINED	LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
8.20	2.20			60% SANDSTONE,FINE GRAINED 40% SILT	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
8.50	0.30			100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
9.00	0.50			65% MUDSTONE 25% SANDSTONE,FINE GRAINED 10% COAL, DULL	GREY-BROWN. LIGHT GREY. UNWEATHERED.
10.00	1.00			70% SANDSTONE,FINE GRAINED 20% MUDSTONE 10% CARBONACEOUS MUDSTONE	LIMONITIC, LIGHT GREY. GREY-BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
11.00	1.00			75% SILT 20% SANDSTONE,FINE GRAINED 5% COAL, DULL	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
13.00	2.00			100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
14.00	1.00			90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
15.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
16.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% SILT	LIMONITIC, LIGHT BROWN. DARK BROWN. UNWEATHERED, MODERATELY STRONG ROCK.
17.00	1.00			100% SANDSTONE,FINE GRAINED	LIMONITIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
22.50	5.50			100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
24.00	1.50			100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.50	5.50			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
30.00	0.50			100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 66

HOLE TYPE	CHIP
EASTING	593,935 M AM GRID
NORTHING	5,391,966 M AM GRID
ELEVATION	295.42 M
TOTAL DEPTH DRILLED	49.00 M
DRILLING STARTED	18/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	17.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	9.60 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 66

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.50	0.50			100% SOIL	ARENACEOUS, LIGHT BROWN, WEATHERED TO SOIL.
3.00	2.50			100% SANDSTONE,FINE GRAINED	LIGHT BROWN.
		BASE OF WEATHERING			
4.00	1.00			100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED.
5.00	1.00			100% SANDSTONE	MED.-FINE GRAINED, GREY-BROWN, UNWEATHERED.
8.00	3.00			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
9.00	1.00			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, UNWEATHERED.
17.00	8.00			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
21.00	4.00			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
24.00	3.00			100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED.
28.00	4.00			60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, GREY. GREY. UNWEATHERED.
34.80	6.80			80% SANDSTONE 20% MUDSTONE	MED.-FINE GRAINED, GREY. GREY. UNWEATHERED.
35.20	0.40			100% CARBONACEOUS MUDSTONE	COALY, UNWEATHERED.
37.00	1.60			50% MUDSTONE 50% SANDSTONE	SILTY, GREY. MED.-FINE GRAINED, GREY. UNWEATHERED.
39.00	2.00			70% MUDSTONE 30% SANDSTONE	SILTY, GREY. MED.-FINE GRAINED, GREY. UNWEATHERED.
40.75	1.75			50% MUDSTONE 40% CARBONACEOUS MUDSTONE 10% SANDSTONE	SILTY, GREY. BROWN-BLACK. MED.-FINE GRAINED, GREY. UNWEATHERED.
		TOP OF DALMAYNE E : 254.67 M R.L.			
41.30	0.55			60% CARBONACEOUS MUDSTONE 40% COAL	COALY. BLACK. UNWEATHERED.
		BASE OF DALMAYNE E : THICKNESS= 0.55 M; SAMPLED THICKNESS= 0.00 M			
42.42	1.12			100% MUDSTONE	CARBONACEOUS, UNWEATHERED.
42.60	0.18			60% COAL 40% CARBONACEOUS MUDSTONE	BLACK. COALY, BLACK. UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.20	2.60			95% MUDSTONE 5% COAL	FOSSILIFERROUS, GREY. FRAGMENTS, BLACK. UNWEATHERED.
49.00	3.80			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DE	0.00 M	40.75 - 41.30 M	0.55 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 69

HOLE TYPE	CHIP
EASTING	592,744 M AM GRID
NORTHING	5,391,764 M AM GRID
ELEVATION	303.60 M
TOTAL DEPTH DRILLED	42.00 M
DRILLING STARTED	19/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	11.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	6.10 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 69

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			100% CLAY	LIGHT BROWN, WEATHERED TO SOIL, VERY WEAK ROCK.
3.50	2.50			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
5.00	1.50			80% CARBONACEOUS MUDSTONE 20% COAL, DULL	BLACK. SLIGHTLY WEATHERED, WEAK ROCK.
6.00	1.00			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
		BASE OF WEATHERING			
7.00	1.00			80% SILTSTONE 15% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. DARK GREY. BLACK. UNWEATHERED, MODERATELY STRONG ROCK.
8.00	1.00			80% SILTSTONE 20% COAL, DULL	GREY. UNWEATHERED, MODERATELY WEAK ROCK.
15.00	7.00			100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
21.00	6.00			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
22.00	1.00			50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
24.00	2.00			90% SANDSTONE,FINE GRAINED 10% SILT	LIGHT GREY. COALY, LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
30.20	6.20			100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
30.40	0.20			100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
42.00	11.60			100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 71

HOLE TYPE	CHIP
EASTING	592,205 M AM GRID
NORTHING	5,393,183 M AM GRID
ELEVATION	257.76 M
TOTAL DEPTH DRILLED	18.00 M
DRILLING STARTED	19/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	999.90 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 71

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			100% CLAY	YELLOW-BROWN, WEATHERED TO SOIL, VERY WEAK ROCK.
8.00	7.00			50% DOLERITE 50% CLAY	SCREE, GREY-GREEN. ORANGE-YELLOW. HIGHLY WEATHERED, VERY STRONG ROCK.
10.90	2.90			100% SILTSTONE	ORANGE-YELLOW, MODERATELY WEAK ROCK.
		BASE OF WEATHERING			
18.00	7.10			100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 72

HOLE TYPE	CHIP
EASTING	591,525 M AM GRID
NORTHING	5,393,309 M AM GRID
ELEVATION	252.84 M
TOTAL DEPTH DRILLED	25.00 M
DRILLING STARTED	20/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	999.90 M
WATER LEVEL AT GEOPHYSICAL LOGGING	2.80 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			100% SOIL	DETRITAL, FRAGMENTS, LIGHT BROWN, WEATHERED TO SOIL.
2.00	1.00			50% SOIL 50% SOIL	ARGILLACEOUS, BROWN. DETRITAL, FRAGMENTS, BROWN. WEATHERED TO SOIL.
3.00	1.00			50% SOIL 50% SOIL	ARGILLACEOUS, YELLOW-BROWN. DETRITAL, FRAGMENTS, BROWN.
4.00	1.00			100% SOIL	ARGILLACEOUS, YELLOW-BROWN.
5.00	1.00			100% MUDSTONE	YELLOW-BROWN.
6.50	1.50			80% MUDSTONE 20% SILTSTONE	YELLOW-BROWN. GREY.
7.00	0.50			60% MUDSTONE 40% SILTSTONE	BROWN. GREY.
8.00	1.00			60% MUDSTONE 40% SILTSTONE	BROWN. GREY.
10.30	2.30			70% MUDSTONE 30% SILTSTONE	GREY. GREY.
			BASE OF WEATHERING		
11.00	0.70			80% MUDSTONE 20% CARBONACEOUS MUDSTONE	GREY. DARK GREY. UNWEATHERED.
13.00	2.00			50% CARBONACEOUS MUDSTONE 50% MUDSTONE	DARK GREY. GREY. UNWEATHERED.
15.00	2.00			80% MUDSTONE 20% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED.
16.10	1.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED.
16.20	0.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
16.70	0.50			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK.
16.80	0.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
17.70	0.90			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
17.80	0.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
18.90	1.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK.
19.00	0.10			75% MUDSTONE 25% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
20.00	1.00			95% MUDSTONE 5% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED.
20.90	0.90			100% MUDSTONE	GREY, UNWEATHERED.
21.00	0.10			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
21.50	0.50			100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
22.00	0.50			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
25.00	3.00			100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 73

HOLE TYPE	CHIP
EASTING	592,555 M AM GRID
NORTHING	5,392,264 M AM GRID
ELEVATION	278.86 M
TOTAL DEPTH DRILLED	18.00 M
DRILLING STARTED	19/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	999.90 M
WATER LEVEL AT GEOPHYSICAL LOGGING	4.00 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 73

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.30	0.30			100% CLAY	ORANGE-YELLOW, WEATHERED TO SOIL, VERY WEAK ROCK.
4.50	4.20			60% DOLERITE 40% CLAY	SCREE, GREY-GREEN. ORANGE-YELLOW. HIGHLY WEATHERED, VERY STRONG ROCK.
9.30	4.80			100% SILTSTONE	GREY-BROWN, SLIGHTLY WEATHERED, WEAK ROCK.
				TOP OF DALMAYNE E : 269.56 M R.L.	
10.65	1.35			100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, WEAK ROCK.
				BASE OF WEATHERING	
				*** CHIP DESCRIPTION ***	
				BASE OF DALMAYNE E : THICKNESS= 1.35 M; SAMPLED THICKNESS= 0.00 M	
15.80	5.15			100% SILTSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK.
				TOP OF : 263.06 M R.L.	
17.00	1.20			80% COAL, DULL 20% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED.
17.15	0.15			100% MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK.
17.30	0.15			100% COAL, DULL	BLACK, UNWEATHERED.
				BASE OF : THICKNESS= 1.50 M; SAMPLED THICKNESS= 0.00 M	
18.00	0.70			100% SILTSTONE	DARK GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
0E	0.00 M	9.30 - 10.65 M	1.35 M
E2	0.00 M	15.80 - 17.30 M	1.50 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 74

HOLE TYPE	CHIP
EASTING	590,847 M AM GRID
NORTHING	5,392,720 M AM GRID
ELEVATION	302.47 M
TOTAL DEPTH DRILLED	14.00 M
DRILLING STARTED	20/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	16.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 74

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.20	1.20			90% SOIL 10% DOLERITE	ARGILLACEOUS, GREY. SCREE, GREY.
3.00	1.80			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN.
5.00	2.00			80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT BROWN. GREY-BROWN.
6.50	1.50			70% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	GREY-BROWN. LIGHT BROWN.
8.00	1.50			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN.
		BASE OF WEATHERING			
9.00	1.00			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED.
9.10	0.10			100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED.
11.00	1.90			100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
12.00	1.00			100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED.
13.00	1.00			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	SILTY, GREY. BROWN-BLACK. UNWEATHERED.
14.00	1.00			100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED.
15.00	1.00			100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
		TOP OF DALMAYNE E : 287.47 M R.L.			
16.00	1.00			100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, FIRM.
		BASE OF DALMAYNE E : THICKNESS= 1.00 M; SAMPLED THICKNESS= 0.00 M			

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DE	0.00 M	15.00 - 16.00 M	1.00 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 75

HOLE TYPE	CHIP
EASTING	591,854 M AM GRID
NORTHING	5,392,483 M AM GRID
ELEVATION	274.40 M
TOTAL DEPTH DRILLED	30.00 M
DRILLING STARTED	20/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	999.90 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.50	0.50			100% SOIL	BROWN, WEATHERED TO SOIL.
8.00	7.50			100% DOLERITE	SCREE, GREY-GREEN, HIGHLY WEATHERED, VERY STRONG ROCK.
9.00	1.00			100% SILTSTONE	ORANGE-YELLOW, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
10.00	1.00			70% SILTSTONE 30% CARBONACEOUS MUDSTONE	ORANGE-YELLOW. BLACK. HIGHLY WEATHERED, MODERATELY WEAK ROCK.
11.00	1.00			100% SILTSTONE	ORANGE-YELLOW, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
13.00	2.00			100% SANDSTONE,FINE GRAINED	ORANGE-YELLOW, MODERATELY WEAK ROCK.
		BASE OF WEATHERING			
21.00	8.00			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.00	6.00			100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
30.00	3.00			60% SILTSTONE 40% MUDSTONE	LIGHT GREY. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 76

HOLE TYPE	CHIP
EASTING	591,151 M AM GRID
NORTHING	5,392,993 M AM GRID
ELEVATION	271.95 M
TOTAL DEPTH DRILLED	36.00 M
DRILLING STARTED	23/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	33.30 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 76

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			90% SOIL 10% DOLERITE	ARGILLACEOUS, LIGHT BROWN. SCREE, GREY. WEATHERED TO SOIL.
3.00	2.00			90% SOIL 10% DOLERITE	ARGILLACEOUS, BROWN. SCREE, GREY. WEATHERED TO SOIL.
4.30	1.30			50% SOIL 50% DOLERITE	ARGILLACEOUS, BROWN. SCREE, GREY. WEATHERED TO SOIL.
6.00	1.70			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, HIGHLY WEATHERED.
7.00	1.00			80% SANDSTONE 20% CLAY	MED.-FINE GRAINED, ARGILLACEOUS, LIGHT BROWN. BROWN. HIGHLY WEATHERED.
11.00	4.00			90% SANDSTONE 10% CLAY	MED.-FINE GRAINED, ARGILLACEOUS, LIGHT BROWN. BROWN.
			BASE OF WEATHERING		
13.00	2.00			100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED.
15.00	2.00			100% MUDSTONE	FOSSILIFERROUS, DARK GREY, UNWEATHERED.
17.00	2.00			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED.
18.00	1.00			100% MUDSTONE	FOSSILIFERROUS, DARK GREY, UNWEATHERED.
19.00	1.00			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, DARK GREY. GREY. UNWEATHERED.
20.00	1.00			80% MUDSTONE 20% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
28.00	8.00			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. FOSSILIFERROUS, GREY. UNWEATHERED.
29.50	1.50			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
29.60	0.10			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK.
31.50	1.90			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
31.70	0.20			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
33.30	1.60			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
33.80	0.50			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
33.90	0.10			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK.
34.50	0.60			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
36.00	1.50			80% SANDSTONE,FINE GRAINED 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 89

HOLE TYPE	CHIP
EASTING	599,259 M AM GRID
NORTHING	[illegible] M AM GRID
ELEVATION	262.48 M
TOTAL DEPTH DRILLED	12.00 M
DRILLING STARTED	25/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.5 MM
LENGTH CASED	
INITIAL WATER LEVEL	5.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 89

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.50	0.50			100% SOIL	ARGILLACEOUS, DARK BROWN, WEATHERED TO SOIL, VERY WEAK ROCK.
1.90	1.40			100% CLAY	ORANGE-BROWN, VERY WEAK ROCK.
2.10	0.20			100% SILT	COMPLETELY WEATHERED, VERY WEAK ROCK.
3.00	0.90			100% COAL	SOOTY, BLACK, HIGHLY WEATHERED, WEAK ROCK.
4.00	1.00			60% MUDSTONE 40% CARBONACEOUS MUDSTONE	DARK GREY. BLACK. WEAK ROCK.
			BASE OF WEATHERING		
4.70	0.70			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
			TOP OF DALMAYNE F : 257.78 M R.L.		
5.60	0.90			90% COAL, DULL 10% CARBONACEOUS MUDSTONE	BLACK. UNWEATHERED.
			BASE OF DALMAYNE F : THICKNESS= 0.90 M; SAMPLED THICKNESS= 0.00 M		
7.00	1.40			100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
8.00	1.00			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
10.00	2.00			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
11.00	1.00			80% MUDSTONE 20% COAL	GREY. UNWEATHERED, MODERATELY WEAK ROCK.
12.00	1.00			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DF	0.00 M	4.70 - 5.60 M	0.90 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 91

HOLE TYPE	CHIP
EASTING	599,039 M AM GRID
NORTHING	5,391,611 M AM GRID
ELEVATION	270.35 M
TOTAL DEPTH DRILLED	24.00 M
DRILLING STARTED	25/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	8.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	0.00 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 91

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.50	3.50			100% CLAY	ORANGE-YELLOW, WEATHERED TO SOIL, VERY WEAK ROCK.
7.00	3.50			100% SILTSTONE	GREY, HIGHLY WEATHERED, WEAK ROCK.
		TOP OF : 263.35 M R.L.			
7.10	0.10			100% COAL	SOOTY, VERY WEAK ROCK.
		BASE OF WEATHERING			
8.40	1.30			100% CARBONACEOUS MUDSTONE	UNWEATHERED, WEAK ROCK.
		BASE OF : THICKNESS= 1.40 M; SAMPLED THICKNESS= 0.00 M			
13.00	4.60			100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.
14.50	1.50			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
15.80	1.30			100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
		TOP OF : 254.55 M R.L.			
16.80	1.00			100% COAL	UNWEATHERED.
		BASE OF : THICKNESS= 1.00 M; SAMPLED THICKNESS= 0.00 M			
18.00	1.20			100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
24.00	6.00			100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
E2	0.00 M	7.00 - 8.40 M	1.40 M
E3	0.00 M	15.80 - 16.80 M	1.00 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 92

HOLE TYPE	CHIP
EASTING	599,235 M AM GRID
NORTHING	5,393,155 M AM GRID
ELEVATION	261.05 M
TOTAL DEPTH DRILLED	12.00 M
DRILLING STARTED	25/11/81
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	139.6 MM
LENGTH CASED	
INITIAL WATER LEVEL	5.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 92

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00			100% CLAY	LIGHT BROWN, WEATHERED TO SOIL, VERY WEAK ROCK.
3.50	2.50			100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, MODERATELY WEAK ROCK.
		BASE OF WEATHERING			
12.00	8.50			100% MUDSTONE	FOSSILIFERROUS, LIGHT GREY, UNWEATHERED, STRONG ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 99

HOLE TYPE	CORE
EASTING	599,373 M AM GRID
NORTHING	5,391,807 M AM GRID
ELEVATION	266.54 M
TOTAL DEPTH DRILLED	18.63 M
DRILLING STARTED	2/12/81
DRILLING TIME	1 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.50	0.50			85% SOIL 15% DOLERITE	BROWN. SCREE, GREY. WEATHERED TO SOIL.
2.30	1.80			100% SOIL	ARENACEOUS, LIGHT BROWN.
6.00	3.70			100% SANDSTONE	MED.-FINE GRAINED, SOIL, GREY-BROWN.
	BASE OF WEATHERING				
				*** CORE DESCRIPTION ***	
6.72	0.72	0		CORE LOSS	
6.81	0.09	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, UNWEATHERED.
7.01	0.20	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
	TOP OF : 259.53 M R.L.				
7.15	0.14	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BLACK. BLACK. UNWEATHERED.
				*** CHIP DESCRIPTION ***	
8.97	1.82			80% COAL 20% MUDSTONE	BLACK. GREY. UNWEATHERED.
				*** CORE DESCRIPTION ***	
9.00	0.03	60		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED.
9.02	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED.
	BASE OF : THICKNESS= 2.01 M; SAMPLED THICKNESS= 0.00 M				
9.05	0.03	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
10.84	1.79	100		97% SANDSTONE,FINE GRAINED 3% CARBONACEOUS MUDSTONE	SILTY, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION, WITH PLANT REMAINS.
12.90	2.06	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
12.94	0.04	100		70% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	PEBBLY, GREY. GREY. UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.92	0.98	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
14.36	0.44	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY. STREAKS, GREY. UNWEATHERED.
14.52	0.16	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED.
14.80	0.28	100		100% SILTSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED.
14.88	0.08	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
14.95	0.07	100		100% SILTSTONE	FINE GRAINED SANDSTONE, CARBONACEOUS, BROWN-BLACK, UNWEATHERED.
15.00	0.05	100		50% CARBONACEOUS MUDSTONE 30% CLAYSTONE 20% COAL, DULL	BROWN-BLACK. INTERCALATIONS, LIGHT BROWN. INTERCALATIONS, BLACK. UNWEATHERED, THINLY LAMINATED, BEDS DIP 2 DEG.
15.26	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED.
15.39	0.13	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
15.63	0.24	0		CORE LOSS	
15.96	0.33	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
17.02	1.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, BROWN, UNWEATHERED.
				TOP OF DALHAYNE F : 249.52 M.R.L.	
17.06	0.04	100	99A01	100% COAL, DULL	BLACK, UNWEATHERED.
17.08	0.02	100	99A01	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED.
17.65	0.57	100	99A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
17.70	0.05	100	99A01	80% CARBONACEOUS MUDSTONE 20% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BROWN-BLACK. STREAKS, BLACK. UNWEATHERED.
17.78	0.08	100	99A01	100% COAL, DULL	BLACK, UNWEATHERED.
17.80	0.02	100	99A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED.
17.86	0.06	100	99A01	100% COAL, DULL	ARGILLACEOUS, BLACK, UNWEATHERED.
				BASE OF DALHAYNE F : THICKNESS= 0.84 M; SAMPLED THICKNESS= 0.84 M	
17.88	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
18.63	0.75	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WITH PLANT REMAINS, WITH FLAME/PULL STRUCTS.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
E3	0.00 M	7.01 - 9.02 M	2.01 M
DF	0.84 M	17.02 - 17.86 M	0.84 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
99A01	17.02 - 17.86 M	0.84 M

TASMANIA 1:100 000
TOPOGRAPHIC SURVEY

BREAK O'DAY

REFER TO THIS MAP AS: SHEET 8514 EDITION 2 1979
LAND TENURE INDEX SERIES

GY57
GY72
GY71
GY76
GY74
GY75
GY73
GY69
GY68
GY92
GY89
GY99
GY91
GY47
GY13
GY8

E.L. 27/84

COAL ONLY SHEET.

FOR MINERALS THE ENTIRE AREA TO BE EXEMPTED. (720 KM²) LESS 55 KM² NOW E.L 27/84

610000 E

5370000 N

T A S M A N

S E A

FREYCINET

SCALE 1:100000

5 cm

● GY8 Location of borehole

Proposed relinquishment areas

AMG REFERENCE POINTS ADDED

387020 D9

THE SHELL COMPANY OF AUSTRALIA LTD.

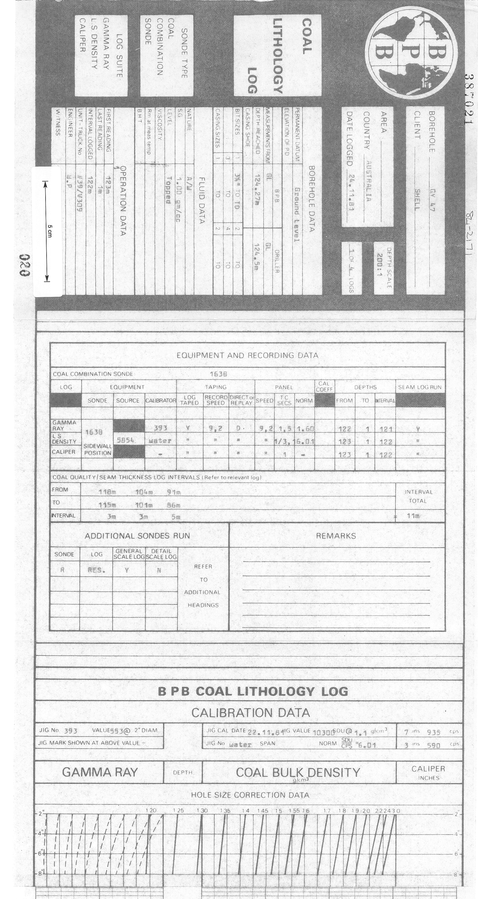
TASMANIA BASIN – TASMANIA

PROPOSED RELINQUISHMENT AREAS

Scale 1:100000

Author: Coal Division	Date: July 1984	Encl. 1
Report No.: CEPR 16/84	Drawing No.: 3427	

84-2171



EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE 1638

LOG	EQUIPMENT			TAPING			PANEL			CAL CHECK	DEPTHS			SEAM LOG RUN
	SONDE	SOURCE	CALIBRATOR	LOG TAPED	RECORD SPEED	DIRECT REPLAY	SPEED	T/C SECS	NORM		FROM	TO	RERUN	
GAMMA RAY	1638		393	Y	9,2	D	9,2	1,5	1,60		122	1	121	Y
L.S. DENSITY		5854	water	"	"	"	"	1/3	1,0		123	1	122	x
CALIPER	SIDEWALL POSITION		-	"	"	"	"	1	-		123	1	122	x

COAL QUALITY (SEAM THICKNESS LOG INTERVALS) (Refer to relevant log)

FROM	118m	104m	91m	INTERVAL TOTAL
TO	115m	101m	86m	
INTERVAL	3m	3m	5m	11m

ADDITIONAL SONDES RUN

SONDE	LOG	GENERAL SCALE LOG	DETAIL SCALE LOG
R	RES.	Y	N

REFER TO ADDITIONAL HEADINGS

REMARKS

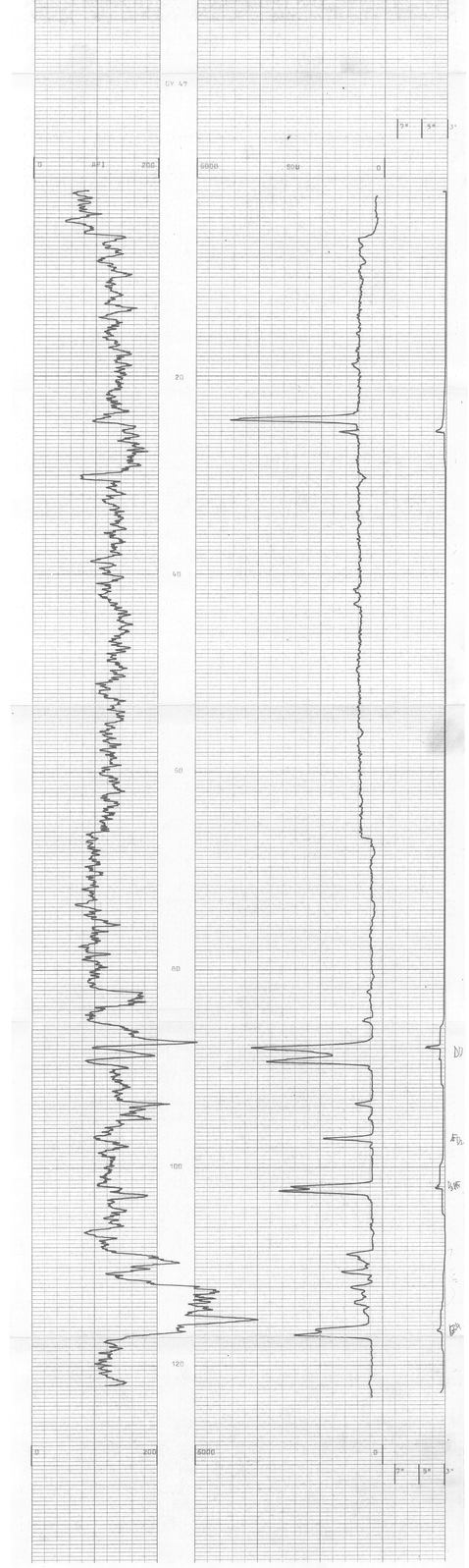
B P B COAL LITHOLOGY LOG

CALIBRATION DATA

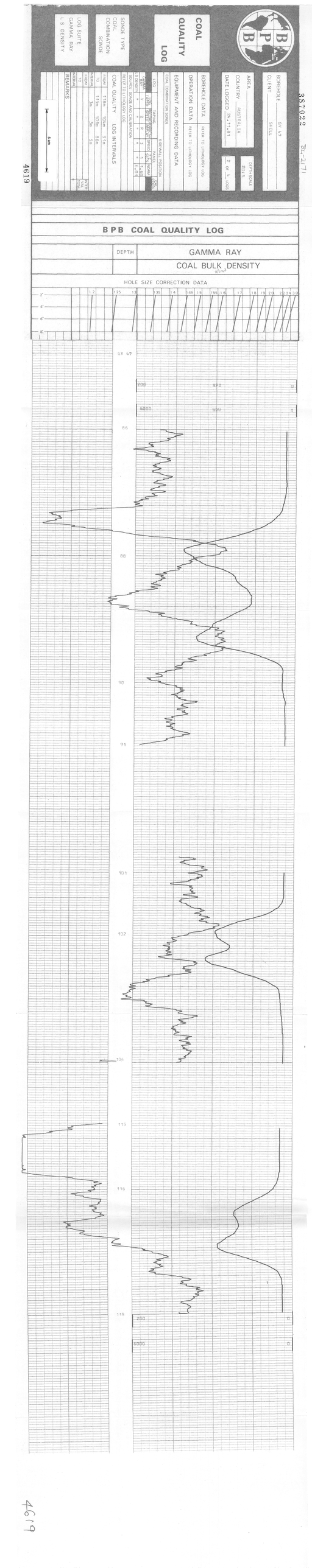
JIG No 393 VALUE 553 2" DIAM.	JIG CAL DATE 22.11.84	% VALUE 1030	SOLID @ 1,1 gm/cm³ 7 cm 935 cps
JIG MARK SHOWN AT ABOVE VALUE "	JIG No water	SPAN	NORM 6,01 3 cm 580 cps

GAMMA RAY	DEPTH	COAL BULK DENSITY	CALIPER
		g/cm³	INCHES

HOLE SIZE CORRECTION DATA



026


BPB
COAL QUALITY LOG
BOREHOLE
CLIENT
SHELL
GY 47
AREA
COUNTRY
AUSTRALIA
DATE LOGGED
24-11-81
DEPTH DRILLED
2019
2 OF 4 LOGS
BOREHOLE DATA
REFER TO LITHOLOGY LOG
OPERATION DATA
REFER TO LITHOLOGY LOG
EQUIPMENT AND RECORDING DATA
COAL COMBINATION SONDE
BOREHOLE WALL POSITION
CALIPER
LOG
SONDE
SENSOR
SPACING
MEASURE
SCALE
NORM
LOG SCALES
COAL QUALITY LOG INTERVALS
SOURCE SONDE AND CALIBRATION
REFER TO LITHOLOGY LOG
SONDE TYPE
COAL COMBINATION SONDE
LOG SUITE
GAMMA RAY
L.S. DENSITY
REMARKS
INTERVAL
FROM
TO
INTERVAL
FROM
TO
5mm
BPB COAL QUALITY LOG
DEPTH
GAMMA RAY
COAL BULK DENSITY
g/cm³
HOLE SIZE CORRECTION DATA
2"
4"
6"
8"
1.2
1.25
1.3
1.35
1.4
1.45
1.5
1.55
1.6
1.7
1.8
1.9
2.0
2.2
2.4
2.6
3.0
GY 47
200
API
6000
API
86
88
90
91
101
102
104
115
116
118
200
6000
3870222
24-2-71
4619
4619

38.0223
82-271

SEAM THICKNESS LOG

BPB

BOREHOLE GY 47
CLIENT — SPELL

AREA
COUNTRY AUSTRALIA
DATE LOGGED 24-11-81

DEPTH SCALE 20:1

30m Lift DOG

SONDE TYPE
COAL COMBINATION SONDE

LOG SUITE
CALIPER
B/E DENSITY

BOREHOLE DATA — REFER TO LITHOLOGY LOG

OPERATION DATA — REFER TO LITHOLOGY LOG

EQUIPMENT AND RECORDING DATA

COAL COMBINATION SONDE

	LOG	TAPPING	PANEL	SONDE SHALL PROTECTION
CALIPER	1	1	1	1
B/E DENSITY	2	2	2	2
	3	3	3	3
	4	4	4	4
	5	5	5	5
	6	6	6	6
	7	7	7	7
	8	8	8	8
	9	9	9	9
	10	10	10	10
	11	11	11	11
	12	12	12	12
	13	13	13	13
	14	14	14	14
	15	15	15	15
	16	16	16	16

SOURCE SONDE AND CALIBRATION — REFER TO LITHOLOGY LOG

SEAM THICKNESS LOG INTERVALS

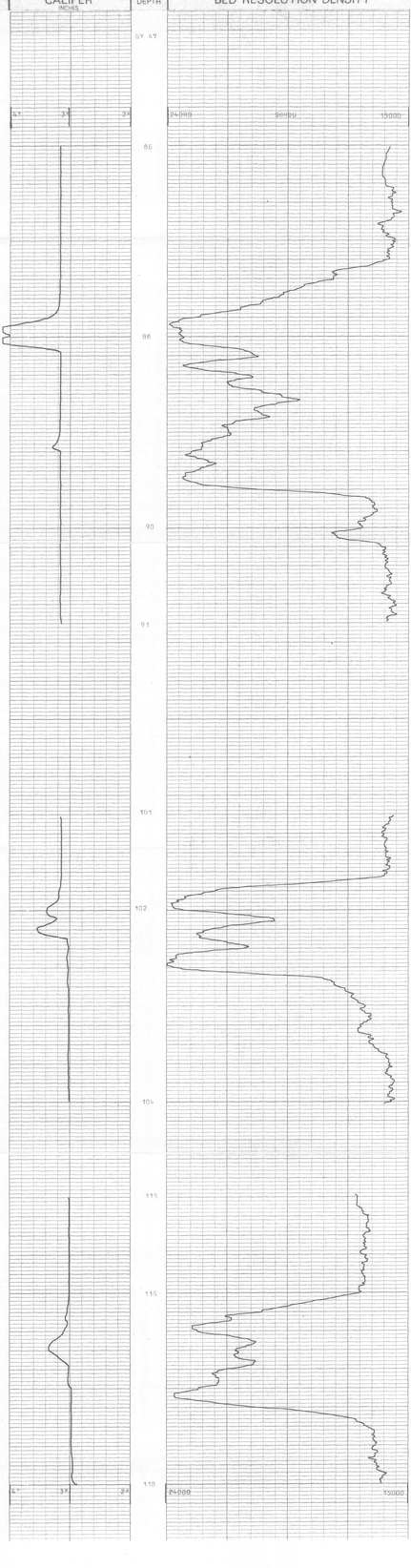
TO ROOF	116m	100.4m	91m
TO ROOF	116m	100.4m	91m
TO FLOOR	119m	103.4m	94m
TO FLOOR	119m	103.4m	94m
INTERVAL	3m	3m	3m
INTERVAL			

REMARKS

5cm

B P B SEAM THICKNESS LOG

CALIPER (INCHES) | DEPTH | BED RESOLUTION DENSITY



4620

387024 84-2171

BPB

GENERAL LOG
RESISTIVITY

BOREHOLE GY 47

CLIENT SHELL

AREA

COUNTRY AUSTRALIA

DATE LOGGED 24.11.81

DEPTH SCALE 200:1

4 OF 4 LOGS

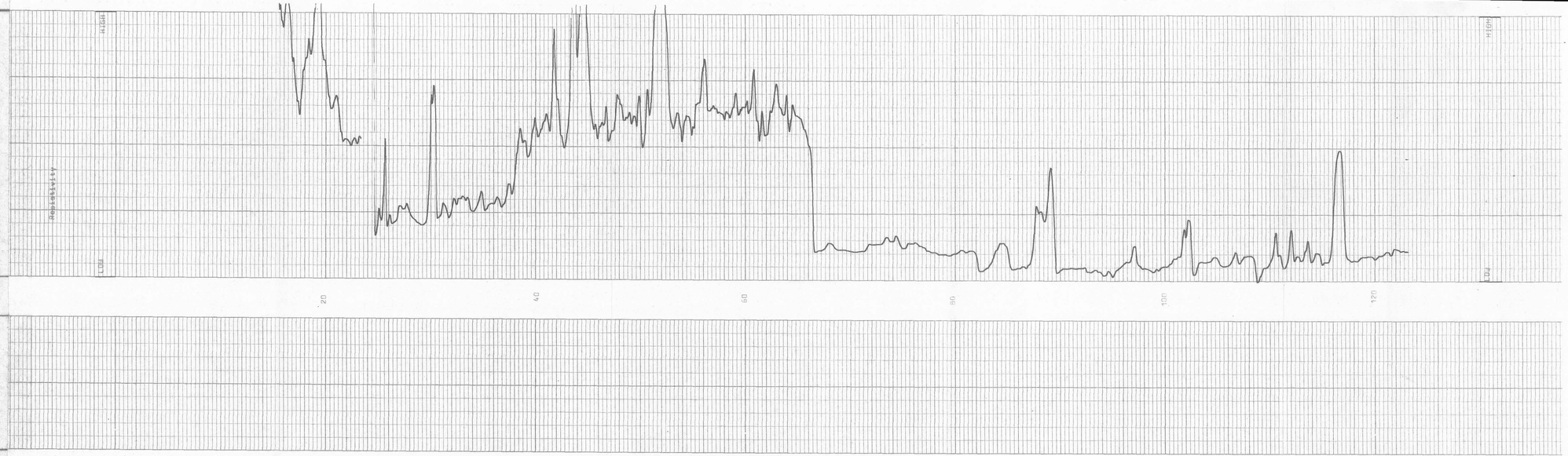
BOREHOLE DATA	REFER TO Lithology LOG
OPERATION DATA	REFER TO Lithology LOG

EQUIPMENT AND RECORDING DATA

LOG	TAPING			PANEL			CAL LOG/TT
	LOG TAPE	RECORD SPEED	DIRECT REPLAY	SPEED	T.C. SECS	NORM	
RES.	Y	9	D	9	1	-	
		SOUND NO	R	CHART DIR	-		

REMARKS

5 cm



4091

387025 8L-21T

BPB

LONG SPACED NEUTRON/NEUTRON LOG

BOREHOLE BY 47

CLIENT SHELL

AREA HAREFIELD

COUNTRY AUSTRALIA(TAS)

DATE LOGGED 1/4/82

DEPTH SCALE 1:200

1 OF 1 LOGS

BOREHOLE DATA	REFER TO Lithology LOG
OPERATION DATA	REFER TO Lithology LOG

EQUIPMENT AND RECORDING DATA

LOG	*	TAPING				PANEL			CAL CURVE
		LOG TAPE	RECORD SPEED	CORRECT REPLAY	SPEED	T.C. SECS	NORM		
LSN/N		Y	5,3	0	5,3	1,3	0.8		
		SOURCE NO 213			PART NO 4662				

REMARKS

The Lithology and 1:20 detail logs of this hole were run on 24/11/81.

5 cm

4622

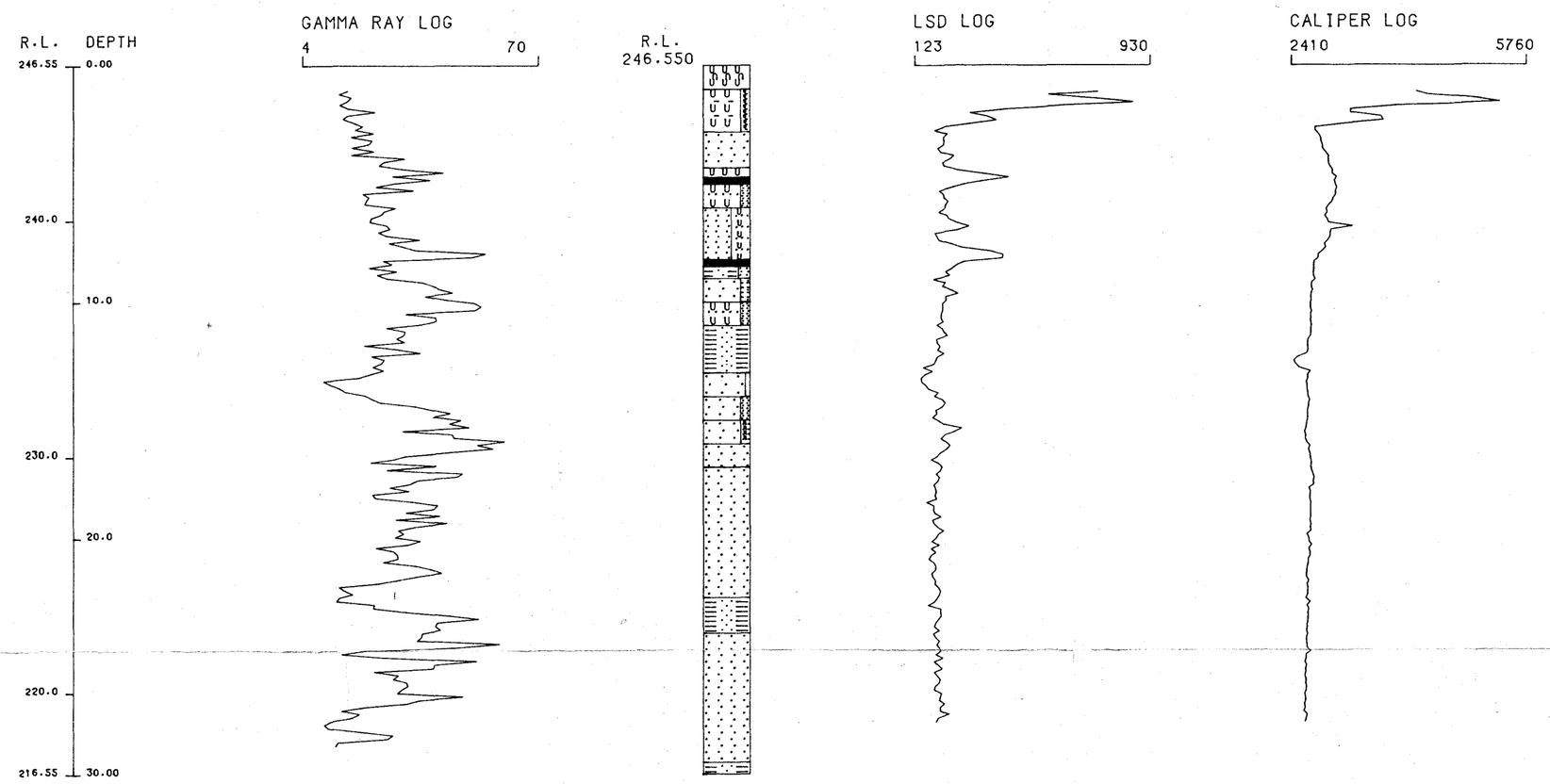
DEPTH

720 350 350 720 350

0 20 40 60 80 100 120 121

change of Baker Travel 80.1 Gain

GY 57



LEGEND

LITHOLOGY REFERENCE

- SOIL
- SILT
- CLAY
- COAL
- SANDSTONE
- MUDSTONE

VERTICAL SCALE

1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387026 4623

THE SHELL COMPANY OF AUSTRALIA LTD.

COAL DIVISION

GRAY EL 5/61 - TASMANIA

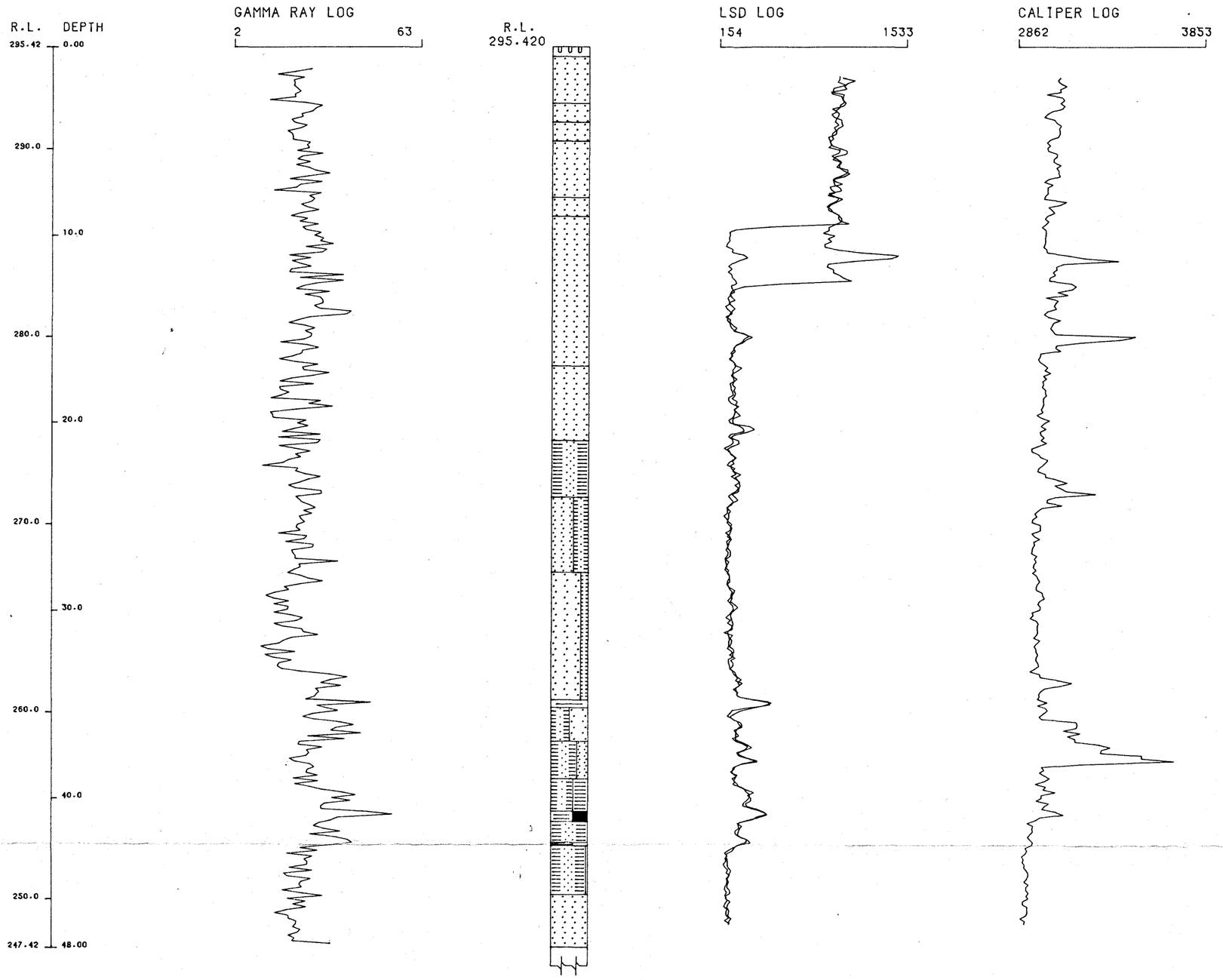
GEOPHYSICAL WIRELINE LOG

GY 57

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 3
REPORT NO: CEPR 16/84	DRAWING NO: 3429	

GY 66



LEGEND

LITHOLOGY REFERENCE

- SOIL
- SANDSTONE
- MUDSTONE
- CARBONACEOUS MUDSTONE
- COAL (UNDIFF.)

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0
METRES

5 cm

387027 4624

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

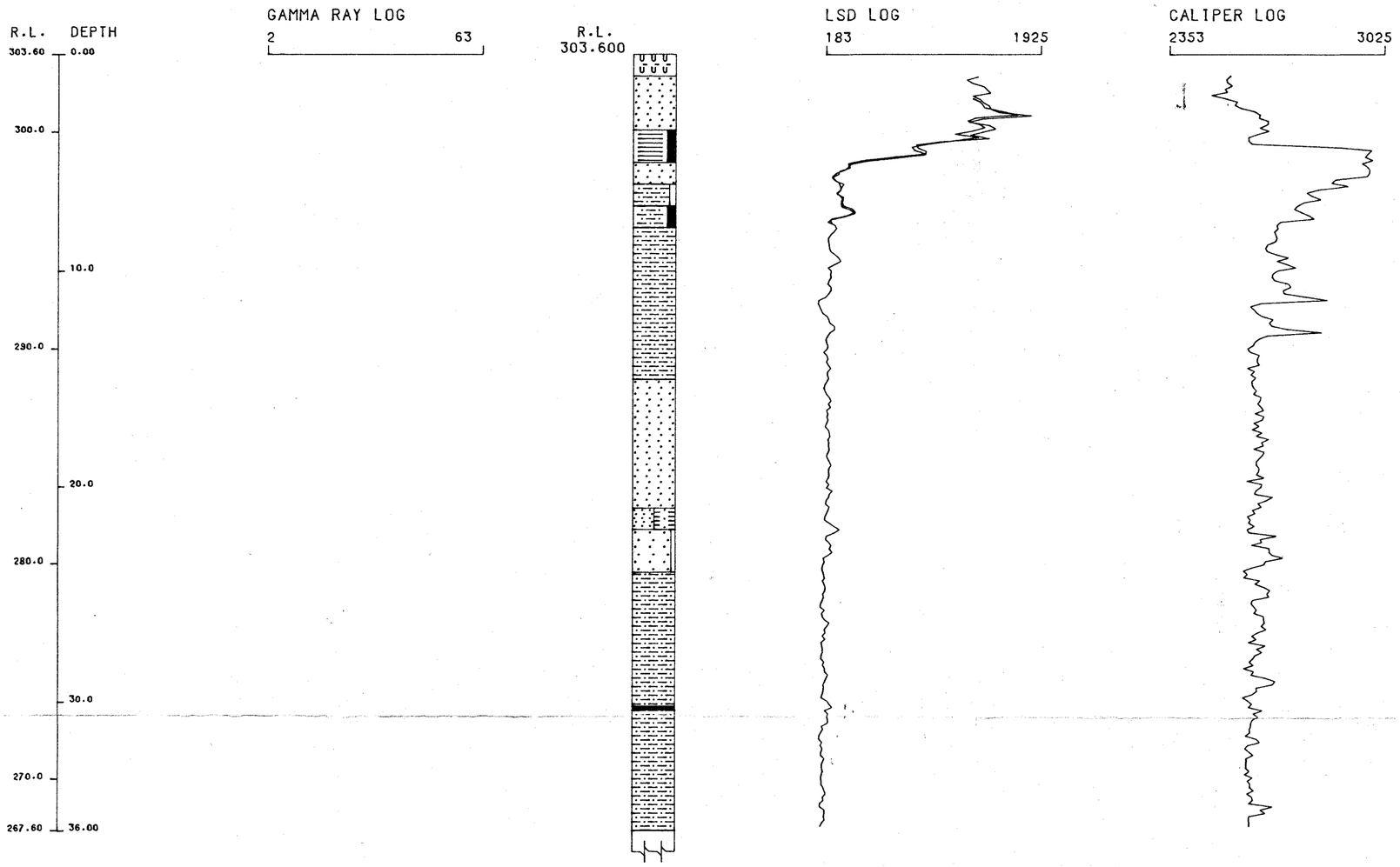
GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG
GY 66

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 4
REPORT NO: CEPR 16/84	DRAWING NO: 3430	

GY 69



LEGEND

LITHOLOGY REFERENCE

- CLAY
- SANDSTONE
- CARBONACEOUS MUDSTONE
- COAL
- SILTSTONE
- MUDSTONE
- SILT

VERTICAL SCALE

1 : 200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

337028

4625

THE SHELL COMPANY OF AUSTRALIA LTD.

COAL DIVISION

GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG

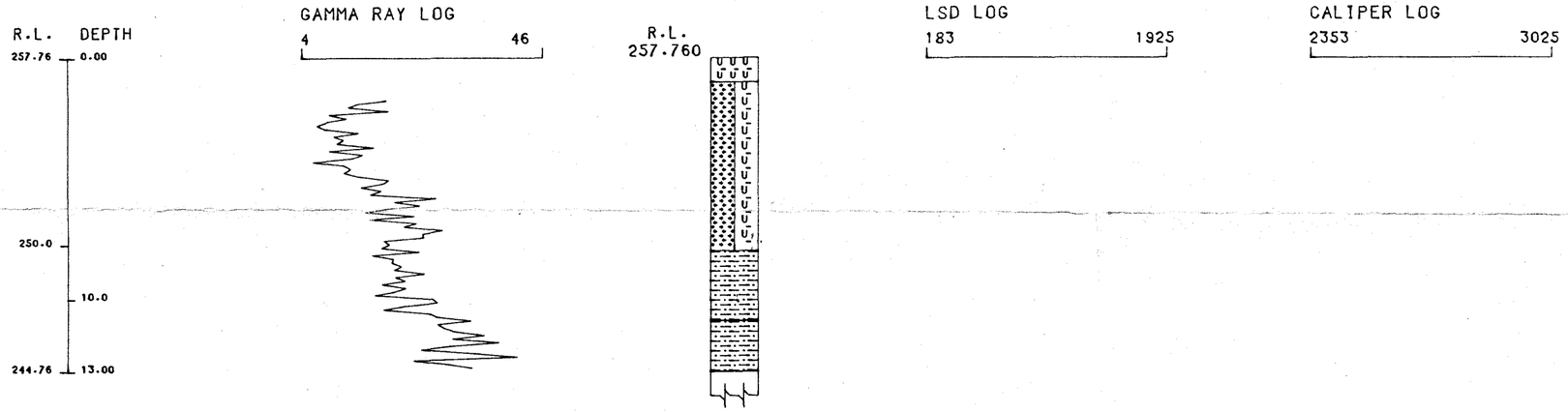
GY 69

84-2171

AUTHOR: Coal Division	DATE: July 1984
REPORT NO: CEPR 16/84	DRAWING NO: 3431

ENCL. 5

GY 71



LEGEND

LITHOLOGY REFERENCE

CLAY

BASIC INTRUSIVE

SILTSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387029 4626

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

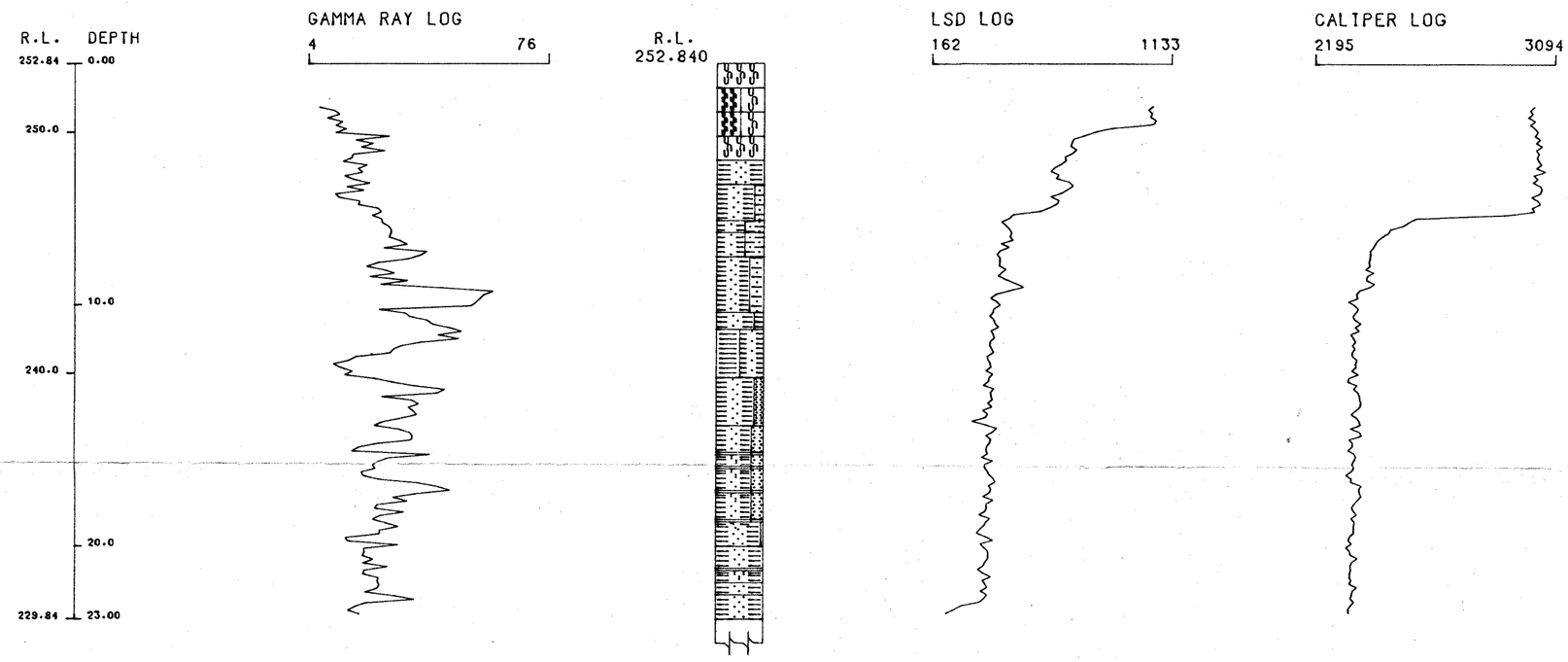
GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG
GY 71

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 6
REPORT NO: CEPR 16/84	DRAWING NO: 3432	

GY 72



LEGEND

LITHOLOGY REFERENCE

- SOIL
- MUDSTONE
- SILTSTONE
- CARBONACEOUS MUDSTONE
- SANDSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387030 4627

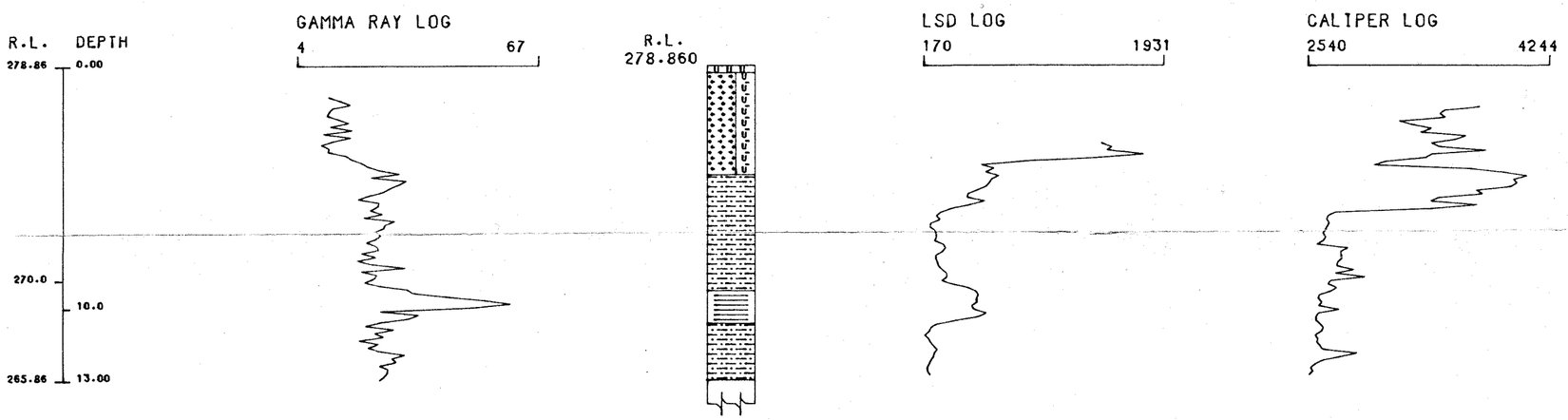
THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG
GY 72
84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 7
REPORT NO: CEPR 16/84	DRAWING NO: 3433	

GY 73



LEGEND

LITHOLOGY REFERENCE

- CLAY
- BASIC INTRUSIVE
- SILTSTONE
- CARBONACEOUS MUDSTONE
- COAL
- MUDSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

4628

387031

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

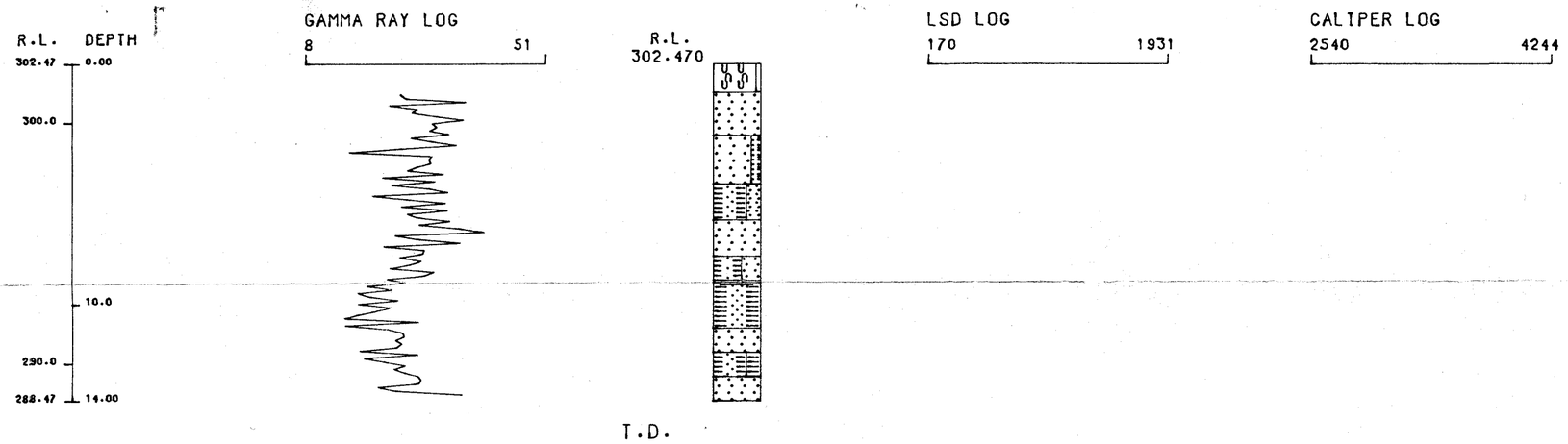
GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG
GY 73

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 8
REPORT NO: CEPR 16/84	DRAWING NO: 3434	

GY 74



LEGEND

LITHOLOGY REFERENCE

- SOIL
- BASIC INTRUSIVE
- SANDSTONE
- MUDSTONE
- CARBONACEOUS MUDSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387032

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

GRAY EL 5/61 - TASMANIA

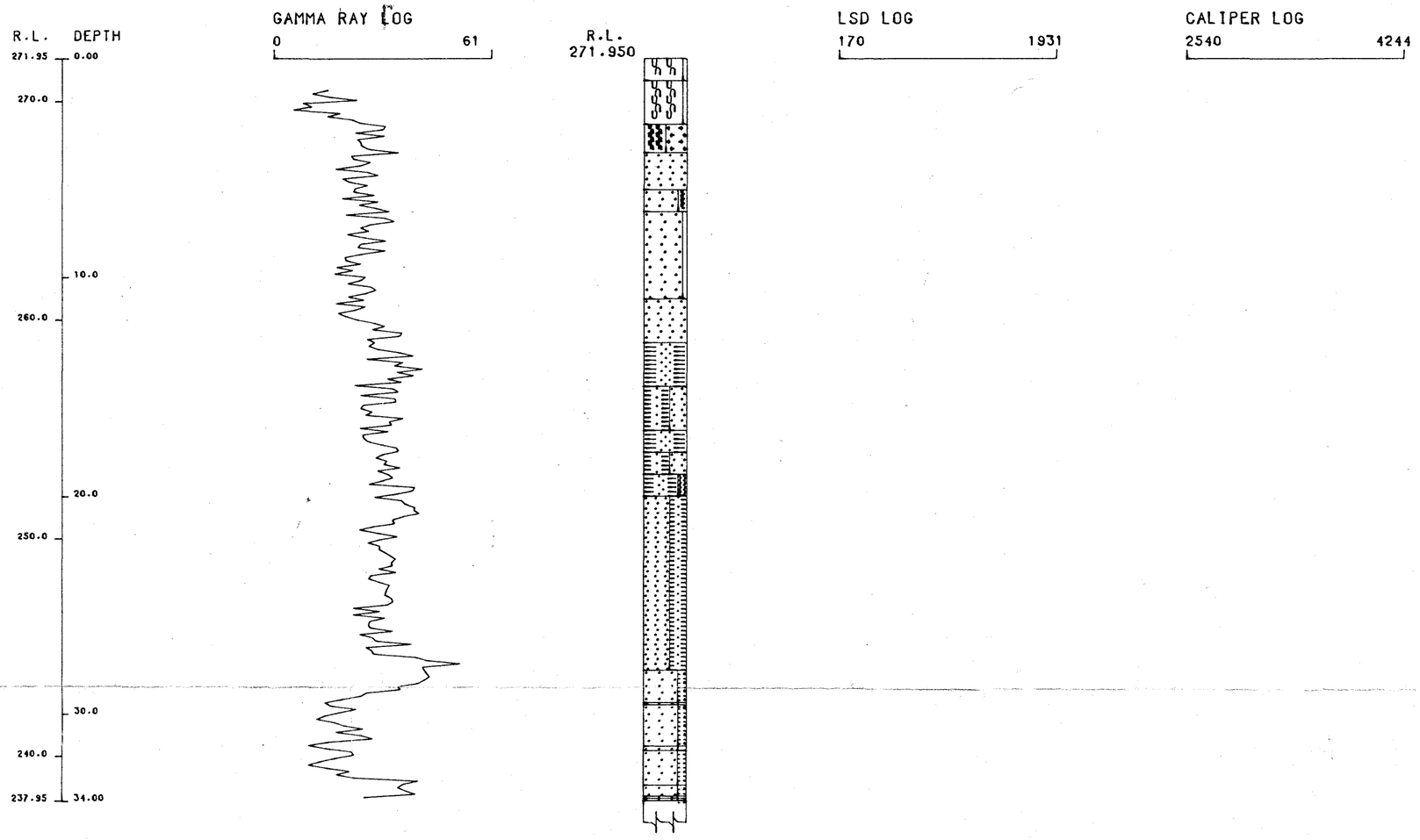
GEOPHYSICAL WIRELINE LOG
GY 74

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 9
REPORT NO: CEPR 16/84	DRAWING NO: 3435	

4629

GY 76



LEGEND

LITHOLOGY REFERENCE

- SOIL
- BASIC INTRUSIVE
- SANDSTONE
- CLAY
- MUDSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387033

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

GRAY EL 5/61 - TASMANIA

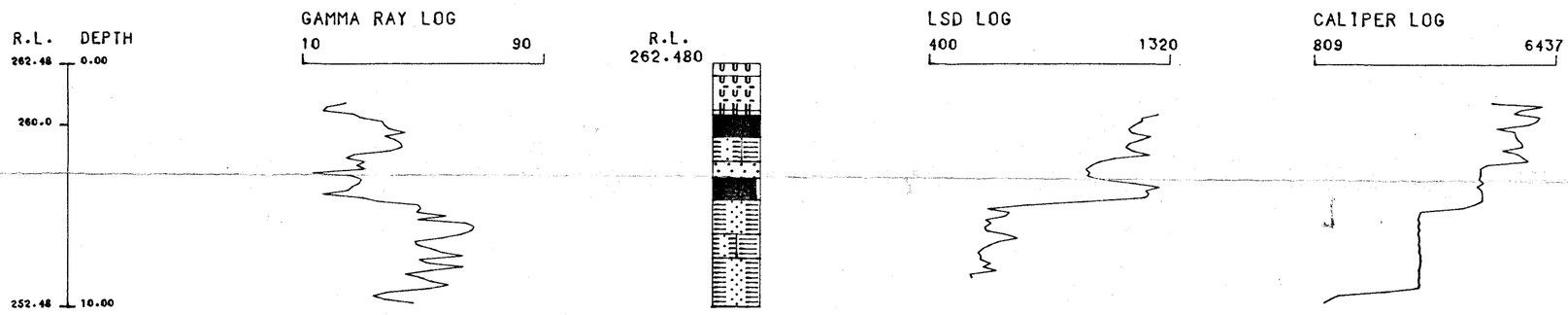
GEOPHYSICAL WIRELINE LOG
GY 76

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 10
REPORT NO: CEPR 16/84	DRAWING NO: 3436	

4630

GY 89



LEGEND

LITHOLOGY REFERENCE

- SOIL
- CLAY
- SILT
- COAL (UNDIFF.)
- MUDSTONE
- CARBONACEOUS MUDSTONE
- SANDSTONE
- COAL

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387034

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

GRAY EL 5/61 - TASMANIA

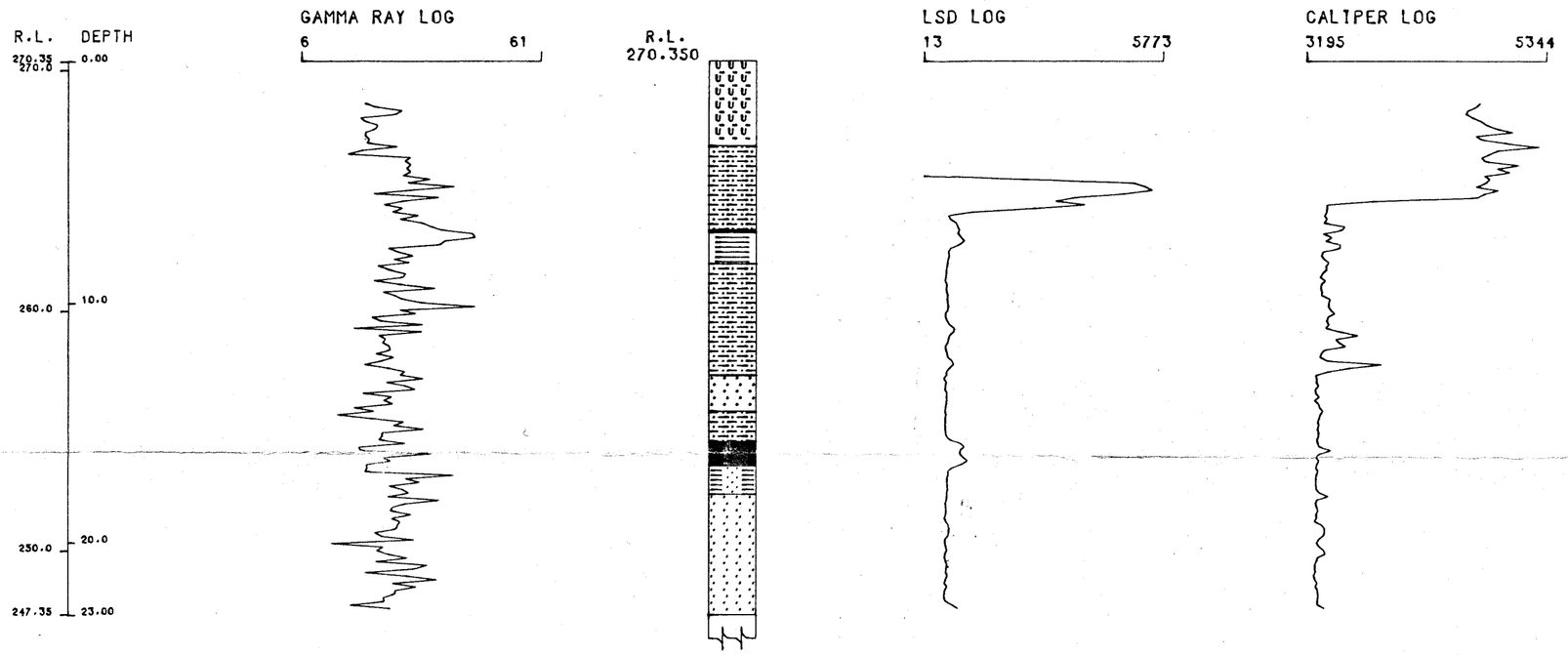
GEOPHYSICAL WIRELINE LOG
GY 89

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 11
REPORT NO: CEPR 16/84	DRAWING NO: 3437	

4631

GY 91



LEGEND

LITHOLOGY REFERENCE

- CLAY
- SILTSTONE
- COAL (UNDIFF.)
- CARBONACEOUS MUDSTONE
- SANDSTONE
- MUDSTONE

VERTICAL SCALE
1:200

4.0 2.0 0.0 2.0 4.0 6.0 8.0 10.0 12.0 14.0 16.0 18.0 20.0

METRES

5 cm

387035

THE SHELL COMPANY OF AUSTRALIA LTD.
COAL DIVISION

GRAY EL 5/61 - TASMANIA

GEOPHYSICAL WIRELINE LOG
GY91

84-2171

AUTHOR: Coal Division	DATE: July 1984	ENCL. 12
REPORT NO: CEPR 16/84	DRAWING NO: 3438	

4632

387036

OPEN FILE

Douglas River and Mt. Nicholas
Borelogs
E.L. 5/61
The Shell Co. of Aust
Pty Ltd.

84-2171
APPX 4 & 5

84-2171

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

APPENDIX 4 BOREHOLE LITHOLOGICAL DESCRIPTIONS

*** FRAME A01***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 1

HOLE TYPE	CORE	
EASTING	602,050 M	GRID
NORTHING	5,382,850 M	GRID
ELEVATION	450.00 M	
TOTAL DEPTH DRILLED	335.00 M	
DRILLING STARTED	13/ 5/78	
DRILLING TIME	20 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.40	0.40	80		90% CLAY 10% DOLERITE	RED-BROWN. FRAGMENTS. COMPLETELY WEATHERED, SOFT.
0.75	0.35	70		100% DOLERITE	YELLOW-BROWN, HIGHLY WEATHERED, WEAK ROCK.
1.85	1.10	80		100% CLAY	YELLOW-BROWN, COMPLETELY WEATHERED, SOFT.
2.25	0.40	80		100% CLAY	FERRUGINOUS, STAINING, YELLOW-BROWN, MODERATELY WEATHERED, FIRM.
3.65	1.40	70		100% CLAY	FERRUGINOUS, STAINING, WHITE, SLIGHTLY WEATHERED, STIFF.
3.95	0.30	90		100% CLAYSTONE	FERRUGINOUS, STAINING, YELLOW-GREY, MODERATELY WEATHERED, VERY WEAK ROCK.
4.00	0.05	100		100% SANDSTONE	FINE GRAINED, YELLOW-GREY, MODERATELY WEATHERED, WEAK ROCK.
4.50	0.50	70		100% SILTSTONE	FERRUGINOUS, STAINING, WHITE, SLIGHTLY WEATHERED, VERY WEAK ROCK.
4.80	0.30	0		CORE LOSS	
5.50	0.70	80		100% CLAY	FERRUGINOUS, STAINING, LIGHT GREY, SLIGHTLY WEATHERED, FIRM.
6.00	0.50	80		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
6.50	0.50	70		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, VERY WEAK ROCK.
6.55	0.05	70		100% CLAYSTONE	CARBONACEOUS, DARK GREY, STIFF.
6.65	0.10	70		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, VERY WEAK ROCK.
6.70	0.05	70		100% CLAYSTONE	CARBONACEOUS, DARK GREY, STIFF.
6.85	0.15	70		100% CLAYSTONE	CARBONACEOUS, LAMINAE, GREY, VERY WEAK ROCK.
8.65	1.80	0		CORE LOSS	
8.70	0.05	60		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY.
8.80	0.10	60		100% MUDSTONE	CARBONACEOUS, BLACK, COMPACT.
8.90	0.10	60		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, VERY WEAK ROCK.
9.00	0.10	70		100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, LIGHT GREY, VERY WEAK ROCK.
11.55	2.55	70		100% CARBONACEOUS SHALE	COALY, BANDS, BLACK. NOTE: VARIES IN STRENGTH FROM MODERATELY WEAK ROCK TO COMPACT
11.60	0.05	80		100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
12.10	0.50	70		100% CARBONACEOUS SHALE	COALY, BANDS, BLACK, VERY WEAK ROCK.
12.30	0.20	70		100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
12.85	0.55	70		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
12.90	0.05	90		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
13.20	0.30	70		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
13.30	0.10	80		100% CARBONACEOUS SHALE	
13.33	0.03	90		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	WITH PYRITE ON CLEAT.
13.48	0.15	80		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
13.58	0.10	90		100% COAL, INTERBANDED DULL AND BRIGHT	
13.70	0.12	80		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
14.00	0.30	70		100% CARBONACEOUS SHALE	COALY, LAMINAE.
14.71	0.71	80		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
14.97	0.26	90		100% SILTSTONE	MUDSTONE, LENSES, GREY, VERY WEAK ROCK.
15.60	0.63	100		100% SILTSTONE	GREY, VERY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
15.90	0.30	100		100% SILTSTONE	GREY, WEAK ROCK, THINLY LAMINATED.
16.15	0.25	100		100% MUDSTONE	SILTSTONE, BANDS, DARK GREY, WEAK ROCK.
16.45	0.30	90		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
17.05	0.60	90		100% MUDSTONE	GREY, WEAK ROCK.
17.25	0.20	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
17.30	0.05	100		100% MUDSTONE	GREY, WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
17.32	0.02	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, WITH LOAD CASTS.
17.76	0.44	100		70% SILTSTONE 30% MUDSTONE	GREY. GREY. WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
17.86	0.10	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, WEAK ROCK.
18.18	0.32	100		50% SANDSTONE 50% MUDSTONE	FINE GRAINED, GREY. GREY. WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
18.57	0.39	100		90% SANDSTONE 10% MUDSTONE	VERY FINE GRAINED, GREY. GREY. WEAK ROCK, THINLY LAMINATED.
18.60	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WEAK ROCK.
18.78	0.18	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
18.81	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WEAK ROCK.
18.94	0.13	100		50% SILTSTONE 50% SANDSTONE	GREY. MED.-FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
18.99	0.05	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, WEAK ROCK.
19.03	0.04	100		100% SANDSTONE	MEDIUM GRAINED, GREY, WEAK ROCK.
19.07	0.04	100		60% SILTSTONE 40% SANDSTONE	GREY. MED.-FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED.
19.09	0.02	100		100% SILTSTONE	GREY.
19.14	0.05	100		60% SILTSTONE 40% SANDSTONE	GREY. FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
19.25	0.11	100		50% SILTSTONE 50% SANDSTONE	GREY. FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED.
19.27	0.02	100		100% SILTSTONE	GREY, WEAK ROCK.
19.30	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WEAK ROCK.
19.33	0.03	100		100% SILTSTONE	GREY, WEAK ROCK, WITH LOAD CASTS.
19.46	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
19.50	0.04	100		100% MUDSTONE	SANDSTONE, BANDS, DARK GREY, WEAK ROCK, WITH LOAD CASTS.
19.52	0.02	100		100% SANDSTONE	MEDIUM GRAINED, GREY, WEAK ROCK, WITH LOAD CASTS.
19.54	0.02	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, WEAK ROCK, WITH LOAD CASTS.
19.67	0.13	100		100% SANDSTONE	MEDIUM GRAINED, GREY, WEAK ROCK.
19.70	0.03	100		100% SILTSTONE	GREY, WEAK ROCK.
19.72	0.02	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WEAK ROCK.
19.90	0.18	100		70% SILTSTONE 30% SANDSTONE	GREY. MED.-FINE GRAINED, GREY. WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
20.00	0.10	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, GREY. GREY. WEAK ROCK, THICKLY LAMINATED.
20.12	0.12	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, GREY. GREY. WEAK ROCK, THINLY LAMINATED.
20.20	0.08	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, WEAK ROCK, THINLY LAMINATED.
20.23	0.03	100		50% SANDSTONE 50% SANDSTONE	FINE GRAINED, GREY. FINE GRAINED, LIGHT GREEN. WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	*** CORE DESCRIPTION *** GEOLOGICAL DESCRIPTION
20.45	0.22	100		90% SANDSTONE 10% SANDSTONE	VERY FINE GRAINED, GREY. VERY FINE GRAINED, LIGHT GREEN. WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS, WITH CROSS LAMINATION.
20.87	0.42	100		100% CLAYSTONE	STIFF, THINLY LAMINATED. NOTE: GRADING FROM GREY TO GREEN: SHARP BASAL CONTACT
20.95	0.08	70		100% PEBBLE CONGLOMERATE	WEAKLY CEMENTED. NOTE: GREEN COARSE GRAINED GROUNDMASS
21.60	0.65	0		CORE LOSS	
22.10	0.50	70		100% PEBBLE CONGLOMERATE	WEAKLY CEMENTED. NOTE: YELLOW COARSE GRAINED GROUNDMASS, PEBBLES MAINLY ROCK FRAGMENTS & QUARTZ WITH MINOR FELDSPAR
23.10	1.00	0		CORE LOSS	
23.89	0.79	100		100% SANDSTONE	VERY COARSE GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
23.93	0.04	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, MODERATELY WEAK ROCK.
24.07	0.14	100		100% SANDSTONE	VERY COARSE GRAINED, GREY-GREEN, MODERATELY STRONG ROCK.
24.17	0.10	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREEN, MODERATELY STRONG ROCK.
24.37	0.20	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LAMINAE, LIGHT GREEN, MODERATELY STRONG ROCK.
24.68	0.31	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY STRONG ROCK.
24.70	0.02	100		100% COAL, HEAVY DULL	SANDSTONE, BANDS.
24.87	0.17	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, STRONG ROCK. NOTE: WITH COALY LENSES AND NUMEROUS MUDSTONE PEBBLES IN BASAL 5 CM, BASAL CONTACT DIPPING AT 30 DEG.
26.72	1.85	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH CARBONACEOUS FRAGMENTS IN DISCRETE BANDS
26.78	0.06	0		CORE LOSS	
26.88	0.10	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
26.93	0.05	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK, WITH LOAD CASTS.
27.00	0.07	0		CORE LOSS	
27.87	0.87	100		100% SANDSTONE	MEDIUM GRAINED, BUFF, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
					NOTE: SILICEOUS CEMENT
27.95	0.08	100		100% CLAY	BUFF, SOFT.
27.98	0.03	100		100% CLAY	LIGHT BROWN, WITH FRAGMENTS OF QUARTZ, SOFT.
28.35	0.37	100		60% MUDSTONE 30% CARBONACEOUS SHALE 10% MUDSTONE	CARBONACEOUS, BLACK. BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
28.47	0.12	0		CORE LOSS	
28.66	0.19	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY-BROWN, WEAK ROCK.
29.60	0.94	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, THINLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
29.80	0.20	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
29.95	0.15	80		100% CLAYSTONE	GREY, STIFF, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
30.35	0.40	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
30.40	0.05	80		100% CLAYSTONE	GREY, *****, STIFF, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
30.55	0.15	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
31.00	0.45	80		100% MUDSTONE	GREY, WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
31.20	0.20	100		100% SANDSTONE	VERY FINE GRAINED, GREY-BROWN, VERY WEAK ROCK.
31.43	0.23	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, GREY, WEAK ROCK.
31.48	0.05	100		100% SANDSTONE	VERY FINE GRAINED, GREY-BROWN, VERY WEAK ROCK.
31.62	0.14	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, FRIABLE, GREY, WEAK ROCK, WITH LOAD CASTS.
31.72	0.10	100		40% SANDSTONE 40% MUDSTONE 20% SANDSTONE	VERY FINE GRAINED, GREY-BROWN. CARBONACEOUS, BLACK. FINE GRAINED, GREY. VERY WEAK ROCK, WITH LOAD CASTS.
31.89	0.17	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
32.00	0.11	100		100% CLAYSTONE	LIGHT GREEN, FIRM.
32.08	0.08	0		CORE LOSS	
32.10	0.02	100		100% CLAYSTONE	GREY-BROWN, STIFF.
32.13	0.03	100		100% COAL, HEAVY DULL	
32.22	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
32.65	0.43	100		100% CLAYSTONE	GREY-BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
32.72	0.07	100		100% SILTSTONE	GREY, WEAK ROCK.
32.76	0.04	100		100% SANDSTONE	FINE GRAINED, GREY, WEAK ROCK.
32.93	0.17	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, WEAK ROCK.
33.53	0.60	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
35.33	1.80	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG.
37.10	1.77	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH CROSS LAMINATION.
37.20	0.10	100		100% SANDSTONE	VERY COARSE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
				NOTE: WITH MUDSTONE PEBBLES	
37.27	0.07	100		100% SANDSTONE	VERY COARSE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
				NOTE: BASAL CONTACT DIPPING AT 20 DEG.	
37.42	0.15	100		100% SANDSTONE	MED.-COARSE GRAINED, ARGILLACEOUS, GREY-GREEN, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
37.54	0.12	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 30 DEG.
37.67	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, ARGILLACEOUS, LIGHT GREEN, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 30 DEG.
37.95	0.28	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
38.10	0.15	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, MODERATELY WEAK ROCK.
				NOTE: WITH MUDSTONE PEBBLES	
40.17	2.07	100		100% SANDSTONE,COARSE GRAINED	SILTSTONE, STREAKS, LIGHT GREEN, MODERATELY WEAK ROCK.
40.37	0.20	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, MODERATELY WEAK ROCK.
43.56	3.19	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREEN, MODERATELY STRONG ROCK.
				NOTE: EXTENSIVE ORANGE STAINING	
43.76	0.20	0		CORE LOSS	
43.79	0.03	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
43.96	0.17	100		70% SILTSTONE 30% SILTSTONE	DARK GREY. LIGHT GREY. WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
44.30	0.34	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, WEAK ROCK, WITH CROSS LAMINATION.
44.50	0.20	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
44.66	0.16	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH MUDSTONE PEBBLES
44.68	0.02	100		70% MUDSTONE 30% SANDSTONE	DARK GREY. MEDIUM GRAINED, LIGHT GREY. WEAK ROCK, THINLY LAMINATED, BEDS DIP 30 DEG.
44.80	0.12	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH MUDSTONE PEBBLES AT TOP AND BASE
44.81	0.01	100		100% COAL, HEAVY DULL	
45.09	0.28	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH BANDS OF MUDSTONE PEBBLES AND CARBONACEOUS FRAGMENTS
45.29	0.20	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH BANDS OF MUDSTONE PEBBLES AND CARBONACEOUS FRAGMENTS
45.60	0.31	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
45.90	0.30	100		50% MUDSTONE 50% SANDSTONE	DARK GREY. MED.-COARSE GRAINED, LIGHT GREY. WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
46.60	0.70	100		100% SILTSTONE	MUDSTONE, LENSES, GREY, WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
46.66	0.06			100% MUDSTONE	CARBONACEOUS, BLACK, WEAKLY CEMENTED.
46.81	0.15			100% MUDSTONE	DARK GREY, VERY WEAK ROCK.
47.54	0.73			100% SILTSTONE	GREY, WEAK ROCK.
47.71	0.17			100% SILTSTONE	DARK GREY, WEAK ROCK.
47.75	0.04			100% MUDSTONE	CARBONACEOUS, BLACK, STIFF.
47.82	0.07			80% MUDSTONE 20% SANDSTONE	COALY, LAMINAE, DARK GREY. MEDIUM GRAINED, LIGHT BROWN. VERY WEAK ROCK.
48.04	0.22			100% CARBONACEOUS SHALE	
48.06	0.02			100% SANDSTONE	FINE GRAINED, GREY, WEAK ROCK.
48.15	0.09			100% CARBONACEOUS SHALE	
48.21	0.06			100% SILTSTONE	LIGHT BROWN, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
48.34	0.13			100% CARBONACEOUS SHALE	
48.38	0.04			100% COAL, HEAVY DULL	
48.43	0.05			100% CARBONACEOUS SHALE	
48.46	0.03			100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
48.59	0.13			100% CARBONACEOUS SHALE	
48.61	0.02			100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, STIFF.
48.73	0.12			100% CARBONACEOUS SHALE	
48.78	0.05			100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, VERY WEAK ROCK.
48.84	0.06			100% CARBONACEOUS SHALE	
49.10	0.26			100% MUDSTONE	DARK GREY, VERY WEAK ROCK.
49.90	0.80			100% MUDSTONE	GREY, VERY WEAK ROCK.
50.10	0.20	0		CORE LOSS	
50.33	0.23	100		100% MUDSTONE	SILTSTONE, FRIABLE, GREY, VERY WEAK ROCK.
50.64	0.31	100		100% MUDSTONE	SILTSTONE, GREY, VERY WEAK ROCK.
50.92	0.28	100		100% MUDSTONE	DARK GREY, VERY WEAK ROCK.
50.94	0.02	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES, BEDS DIP 20 DEG.
51.19	0.25	100		100% MUDSTONE	GREY-GREEN, VERY WEAK ROCK.
51.27	0.08	100		100% CLAYSTONE	CARBONACEOUS, BANDS, BUFF, FIRM, BEDS DIP 10 DEG.
51.28	0.01	100		100% CARBONACEOUS SHALE	MUDSTONE, BANDS, BEDS DIP 10 DEG.
51.31	0.03	100		100% MUDSTONE	DARK GREY, VERY WEAK ROCK, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, WITH LOAD CASTS.
51.32	0.01	100		100% MUDSTONE	COALY, LENSES, GREY, VERY WEAK ROCK, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, WITH LOAD CASTS.
51.41	0.09	100		100% CARBONACEOUS SHALE	MUDSTONE, BANDS, BEDS DIP 10 DEG., WITH LOAD CASTS.
51.60	0.19	0		CORE LOSS	
51.63	0.03	60		100% CARBONACEOUS SHALE	MUDSTONE, BANDS.
51.66	0.03	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK GREY, VERY WEAK ROCK, BEDS DIP 10 DEG.
51.72	0.06	100		100% MUDSTONE	COALY, LENSES, GREY, VERY WEAK ROCK, WITH LOAD CASTS.
51.87	0.15	80		100% CARBONACEOUS SHALE	COALY, BANDS.
51.92	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
51.98	0.06			100% SILTSTONE	MUDSTONE, LAMINAE, GREY, WEAK ROCK, WITH FLAME/PILL STRUCTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.11	0.13			100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS, WITH CARBONACEOUS WISPS.
52.91	0.80			80% SANDSTONE 15% MUDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
53.10	0.19			100% MUDSTONE	GREY, WEAK ROCK.
54.47	1.37	100		80% SANDSTONE 20% MUDSTONE	MED.-FINE GRAINED, GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
54.60	0.13	100		70% MUDSTONE 30% SANDSTONE	GREY. FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
54.79	0.19	100		50% MUDSTONE 50% SANDSTONE	GREY. FINE GRAINED, GREY. WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
54.99	0.20	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH CROSS LAMINATION.
55.11	0.12	100		80% SANDSTONE 20% SILTSTONE	COARSE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
55.40	0.29	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS.
55.47	0.07	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
55.48	0.01	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
55.63	0.15	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, WEAK ROCK, WITH CROSS LAMINATION.
55.80	0.17	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
55.85	0.05	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, WEAK ROCK, WITH CROSS LAMINATION.
57.68	1.83	100		100% SANDSTONE	COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS. NOTE: BASAL CONTACT DIPPING AT 20 DEG. LARGE SILTSTONE LENSE NEAR BASE
57.83	0.15	100		100% SILTSTONE	GREY, WEAK ROCK, THINLY LAMINATED, BEDS DIP 20 DEG., WITH CROSS LAMINATION. NOTE: LARGE SANDSTONE LENSE NEAR BASE
57.95	0.12	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: BASAL CONTACT DIPPING AT 20 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
58.00	0.05	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG. NOTE: WITH NUMEROUS COAL AND MUDSTONE LENSES
59.10	1.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
64.80	5.70	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG. NOTE: WITH OCCASIONAL MUDSTONE AND CARBONACEOUS FRAGMENTS ON BEDDING PLANES
64.92	0.12	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS FRAGMENTS AND MUDSTONE PEBBLES
65.10	0.18	0		CORE LOSS	
65.22	0.12	80		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS FRAGMENTS AND MUDSTONE PEBBLES
65.36	0.14	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, WEAK ROCK, WITH CROSS LAMINATION.
65.62	0.26	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS MUDSTONE PEBBLES AND COAL LENSES
65.66	0.04	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
65.81	0.15	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS MUDSTONE PEBBLES AND COAL LENSES
66.13	0.32	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
66.17	0.04	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WEAK ROCK.
66.20	0.03	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
66.35	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
66.60	0.25	100		100% SILTSTONE	GREY, WEAK ROCK.
66.63	0.03	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
67.09	0.46	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
67.34	0.25	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, BEDS DIP 20 DEG. NOTE: WITH NUMEROUS MUDSTONE PEBBLES AND COAL LENSES, TRUNCATED UPPER CONTACT
68.31	0.97	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
68.53	0.22	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH ABUNDANT COAL STREAKS AND LENSES
68.83	0.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH ABUNDANT COAL STREAKS AND LENSES AND MUDSTONE PEBBLES
69.05	0.22	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: WITH ABUNDANT MUDSTONE PEBBLES IN BASAL 3 CM
69.10	0.05	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
69.54	0.44	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
69.65	0.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
70.15	0.50	80		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
70.17	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, STIFF.
70.30	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
70.37	0.07	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
70.42	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
70.66	0.24	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, FIRM.
70.77	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
70.88	0.11	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BUFF, FIRM.
71.05	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
71.10	0.05	0		CORE LOSS	
71.14	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, FIRM.
71.60	0.46	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, STIFF.
71.63	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
71.90	0.27	80		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
72.00	0.10	0		CORE LOSS	
72.03	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
72.08	0.05	100		100% MUDSTONE	DARK GREY, WEAK ROCK, WITH FLAME/PULL STRUCTS.
72.26	0.18	100		100% MUDSTONE	GREY, WEAK ROCK. NOTE: WITH NUMEROUS MUDSTONE AND CARBONACEOUS FRAGMENTS AT TOP AND BASE, BASAL CONTACT RIPPLED AND DIPPING AT 20 DEG.
72.38	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH RIPPLES, WITH LOAD CASTS.
72.82	0.44	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
73.27	0.45	100		70% SANDSTONE 30% SILTSTONE	FINE GRAINED, LIGHT GREY. GREY. WEAK ROCK, THICKLY LAMINATED.
74.10	0.83	100		100% SILTSTONE	GREY, WEAK ROCK.
75.16	1.06	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
75.29	0.13	100		100% MUDSTONE	DARK GREY, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.31	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
75.33	0.02	100		100% MUDSTONE	DARK GREY, SOFT.
75.39	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, CREAM, SOFT.
75.60	0.21	80		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
75.69	0.09	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
75.93	0.24	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
76.03	0.10	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, FIRM.
76.12	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK. NOTE: JOINT WITH SLICKENSIDES AT BASE
77.02	0.90	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WEAK ROCK.
77.36	0.34	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
77.51	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, WEAK ROCK, WITH CROSS LAMINATION.
78.66	1.15	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
80.10	1.44	100		100% SILTSTONE	GREY, WEAK ROCK.
80.22	0.12	100		100% MUDSTONE	LIGHT GREY, VERY WEAK ROCK.
81.72	1.50	100		100% SILTSTONE	GREY, WEAK ROCK.
81.83	0.11	100		100% SANDSTONE,COARSE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS. NOTE: WITH ABUNDANT MUDSTONE AND CARBONACEOUS FRAGMENTS
82.26	0.43	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
82.72	0.46	100		100% SILTSTONE	GREY, WEAK ROCK.
82.82	0.10	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, WEAK ROCK.
82.96	0.14	100		100% MUDSTONE	SILTSTONE, DARK GREY, WEAK ROCK.
83.05	0.09	100		80% SILTSTONE 20% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
83.10	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, WEAK ROCK. NOTE: WITH COARSE SANDSTONE LENSES AND ABUNDANT MUDSTONE FRAGMENTS
83.15	0.05	100		100% SANDSTONE,MEDIUM GRAINED	DARK GREY, WEAK ROCK. NOTE: WITH NUMEROUS COAL AND MUDSTONE FRAGMENTS
83.23	0.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, WEAK ROCK. NOTE: WITH COARSE SANDSTONE LENSES
83.36	0.13	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK. NOTE: WITH ABUNDANT MUDSTONE PEBBLES AND FRAGMENTS

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
83.82	0.46	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS AND MUDSTONE FRAGMENTS
83.88	0.06	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
83.91	0.03	100		100% MUDSTONE	LIGHT BROWN, SOFT.
83.99	0.08	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
84.02	0.03	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.
84.15	0.13	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
84.18	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
84.60	0.42	100		100% SILTSTONE	GREY-GREEN, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
85.00	0.40	100		100% SILTSTONE	MUDSTONE, BANDS, GREY-GREEN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
85.95	0.95	100		100% CLAYSTONE	GREY-GREEN, FIRM.
86.45	0.50	100		100% SILTSTONE	COALY, FRIABLE, GREY-GREEN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
86.65	0.20	100		100% SANDSTONE,MEDIUM GRAINED	GREY, WEAK ROCK.
86.76	0.11	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, WEAK ROCK.
86.94	0.18	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY-GREEN, WEAK ROCK.
87.02	0.08	100		100% MUDSTONE	GREY-GREEN, WEAK ROCK.
87.10	0.08	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
87.15	0.05	100		100% MUDSTONE	GREY, WEAK ROCK.
87.20	0.05	100		100% SILTSTONE	SANDSTONE, LENSES, BROWN, WEAK ROCK.
87.30	0.10	100		50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	SILTSTONE, FRIABLE, LIGHT GREY. GREY. WEAK ROCK. NOTE: INTERFINGURING OF SANDSTONE WITH SILTSTONE
89.10	1.80	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG.
89.85	0.75	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
94.94	5.09	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WIDELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
95.17	0.23	100		100% CLAYSTONE	COALY, LENSES, GREY-GREEN, STIFF.
95.59	0.42	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.60	1.01	100		100% SANDSTONE,COARSE GRAINED	GREY, MODERATELY STRONG ROCK. NOTE: WITH ABUNDANT COAL LENSES AND MUDSTONE FRAGMENTS
96.86	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
96.94	0.08	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
97.10	0.16	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
97.21	0.11	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, BEDS DIP 20 DEG.
97.31	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK, BEDS DIP 20 DEG.
97.45	0.14	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, BEDS DIP 20 DEG.
97.55	0.10	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY STRONG ROCK, BEDS DIP 20 DEG.
97.65	0.10	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LENSES, GREY, MODERATELY STRONG ROCK.
97.75	0.10	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 0 DEG.
98.85	1.10	100		100% SANDSTONE,COARSE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH CARBONACEOUS AND MUDSTONE FRAGMENTS
99.30	0.45	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
99.55	0.25	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
101.10	1.55	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: SOME JOINTS INFILLED WITH CALCITE
101.60	0.50	100		100% DOLERITE	VERY FINE GRAINED, DARK GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
103.00	1.40	100		100% DOLERITE	MED.-FINE GRAINED, DARK GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
103.50	0.50	90		100% DOLERITE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
104.35	0.85	80		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CONTAINS COAL BAND WITH NUMEROUS JOINTS INFILLED WITH CALCITE,COAL APPEARS BURNT, SURROUNDING MUDSTONE HAS PURPLE TINT
105.26	0.91	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
					NOTE: IRREGULAR STEEPLY ANGLED BASAL CONTACT
		TOP OF	DALMAYNE B : 344.74 M R.L.		
106.00	0.74	70		100% COAL	BURNT. NOTE: FINE CALCITE FILLED JOINTS IN TOP 3 CM.
108.00	2.00	0		CORE LOSS	
108.20	0.20	80		100% CARBONACEOUS SHALE	
110.00	1.80	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
112.28	2.28	100		100% SILTSTONE	GREY, WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
113.04	0.76	100		100% MUDSTONE	SANDSTONE, BANDS, BLACK, WEAK ROCK, THINLY LAMINATED, BEDS DIP 10 DEG.
113.10	0.06	100		100% CARBONACEOUS SHALE	
113.23	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
113.67	0.44	100		100% SILTSTONE	GREY, WEAK ROCK.
113.91	0.24	100		100% MUDSTONE	DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
114.10	0.19	100		100% MUDSTONE	GREY-GREEN, WEAK ROCK.
114.20	0.10	100		100% CLAYSTONE	GREY-GREEN, STIFF.
114.30	0.10	100		100% SILTSTONE	GREY-GREEN, VERY WEAK ROCK.
114.45	0.15	100		100% MUDSTONE	GREY, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
114.62	0.17	100		100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
114.74	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
114.77	0.03	100		100% CARBONACEOUS SHALE	
114.82	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.
114.85	0.03	100		100% COAL, HEAVY DULL	
114.97	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.
115.05	0.08	100		100% CARBONACEOUS SHALE	
115.22	0.17	100		100% MUDSTONE	GREY, WEAK ROCK.
115.31	0.09	100		100% CARBONACEOUS SHALE	MUDSTONE, BANDS.
115.35	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
115.36	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, CONCRETIONS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
115.43	0.07	100		100% MUDSTONE	COALY, LENSES, DARK GREY, VERY WEAK ROCK.
			BASE OF DALMAYNE B : THICKNESS= 10.17 M; SAMPLED THICKNESS= 0.00 M		
115.46	0.03	100		60% SANDSTONE 40% MUDSTONE	FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
115.57	0.11	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, WEAK ROCK.
115.59	0.02	100		100% MUDSTONE	LIGHT BROWN, STIFF, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
115.68	0.09	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
115.90	0.22	100		60% SANDSTONE 40% MUDSTONE	FINE GRAINED, LIGHT GREY. CARBONACEOUS, BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
116.02	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
116.26	0.24	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS. NOTE: WITH LARGE MEDIUM GRAINED SANDSTONE LENSES
119.35	3.09	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
120.40	1.05	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
121.00	0.60	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
121.90	0.90	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES AND MUDSTONE FRAGMENTS
127.36	5.46	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
128.66	1.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
128.72	0.06	100		100% MUDSTONE	GREY, WEAK ROCK.
128.78	0.06	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH ABUNDANT MUDSTONE PEBBLES
129.38	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS-LAMINATION.
130.20	0.82	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS COALY FRAGMENTS AND LENSES
130.35	0.15	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH ABUNDANT COALY LENSES

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF	DALMAYNE C : 319.65 M R.L.		
130.49	0.14	100		100% COAL, DULL	
130.57	0.08	100		100% MUDSTONE	LIGHT BROWN, STIFF.
130.82	0.25	100		100% CARBONACEOUS SHALE	
130.83	0.01	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
130.87	0.04	100		100% CARBONACEOUS SHALE	
130.88	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
130.90	0.02	100		100% CARBONACEOUS SHALE	MUDSTONE, FRIABLE.
130.92	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
131.00	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
131.07	0.07	100		100% COAL, HEAVY DULL	
131.10	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
131.13	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
131.19	0.06	100		100% CARBONACEOUS SHALE	
131.21	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
131.31	0.10	100		100% CARBONACEOUS SHALE	
131.43	0.12	100		100% MUDSTONE	BRIGHT COAL, STREAKS, BLACK, STRONG ROCK.
131.47	0.04	100		100% COAL, HEAVY DULL	
131.50	0.03	100		100% MUDSTONE	LIGHT BROWN.
131.70	0.20	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
131.84	0.14	100		100% CARBONACEOUS SHALE	
131.85	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
131.91	0.06	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
131.95	0.04	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
131.97	0.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
132.00	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
132.04	0.04	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
132.08	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
132.10	0.02	100		100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
132.14	0.04	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
132.18	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
132.21	0.03	100		100% CARBONACEOUS SHALE	
				BASE OF DALMAYNE C : THICKNESS= 1.86 M; SAMPLED THICKNESS= 0.00 M	
132.22	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE C : 317.78 M R.L.	
132.34	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
				BASE OF DALMAYNE C : THICKNESS= 0.12 M; SAMPLED THICKNESS= 0.00 M	
132.39	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE C : 317.61 M R.L.	
132.78	0.39	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
				BASE OF DALMAYNE C : THICKNESS= 0.39 M; SAMPLED THICKNESS= 0.00 M	
133.03	0.25	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE C : 316.97 M R.L.	
133.21	0.18	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
				BASE OF DALMAYNE C : THICKNESS= 0.18 M; SAMPLED THICKNESS= 0.00 M	
133.23	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE C : 316.77 M R.L.	
133.26	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
				BASE OF DALMAYNE C : THICKNESS= 0.03 M; SAMPLED THICKNESS= 0.00 M	
133.27	0.01	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
			TOP OF DALMAYNE C : 316.73 M R.L.		
133.29	0.02	100		100% MUDSTONE	CARBONACEOUS.
			BASE OF DALMAYNE C : THICKNESS= 0.02 M; SAMPLED THICKNESS= 0.00 M		
133.30	0.01	100		100% COAL, BRIGHT	
			TOP OF DALMAYNE C : 316.70 M R.L.		
133.41	0.11	100		100% COAL, HEAVY DULL	
			BASE OF DALMAYNE C : THICKNESS= 0.11 M; SAMPLED THICKNESS= 0.00 M		
133.42	0.01	100		100% MUDSTONE	CARBONACEOUS.
			TOP OF DALMAYNE C : 316.58 M R.L.		
133.47	0.05	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY.
			BASE OF DALMAYNE C : THICKNESS= 0.05 M; SAMPLED THICKNESS= 0.00 M		
133.64	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
			TOP OF DALMAYNE C : 316.36 M R.L.		
133.76	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
			BASE OF DALMAYNE C : THICKNESS= 0.12 M; SAMPLED THICKNESS= 0.00 M		
133.80	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
			TOP OF DALMAYNE C : 316.20 M R.L.		
133.81	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK.
			BASE OF DALMAYNE C : THICKNESS= 0.01 M; SAMPLED THICKNESS= 0.00 M		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
133.82	0.01	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY STRONG ROCK.
		TOP OF DALMAYNE C : 316.18 M R.L.			
133.86	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK.
		BASE OF DALMAYNE C : THICKNESS= 0.04 M; SAMPLED THICKNESS= 0.00 M			
133.96	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
		TOP OF DALMAYNE C : 316.04 M R.L.			
133.97	0.01	100		100% COAL, BRIGHT	
		BASE OF DALMAYNE C : THICKNESS= 0.01 M; SAMPLED THICKNESS= 0.00 M			
134.00	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
		TOP OF DALMAYNE C : 316.00 M R.L.			
134.06	0.06	100		100% MUDSTONE	DARK BROWN, STRONG ROCK.
		BASE OF DALMAYNE C : THICKNESS= 0.06 M; SAMPLED THICKNESS= 0.00 M			
134.07	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
		TOP OF DALMAYNE C : 315.93 M R.L.			
134.15	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
134.25	0.10	100		50% CARBONACEOUS SHALE 50% COAL, BRIGHT	THINLY LAMINATED.
134.52	0.27	100		100% MUDSTONE	COALY, LENSES, DARK GREY, WEAK ROCK.
		BASE OF DALMAYNE C : THICKNESS= 0.45 M; SAMPLED THICKNESS= 0.00 M			
135.21	0.69	100		100% MUDSTONE	GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
135.95	0.74	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
136.08	0.13	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
140.96	4.88	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
141.06	0.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
141.68	0.62	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
142.05	0.37	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
142.50	0.45	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
143.14	0.64	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
143.58	0.44	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES
144.92	1.34	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES
144.99	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
145.54	0.55	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES AND MUDSTONE FRAGMENTS
145.65	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, WEAK ROCK.
145.70	0.05	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
145.90	0.20	100		100% MUDSTONE	DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
146.18	0.28	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
147.76	1.58	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
147.81	0.05	100		100% SANDSTONE,MEDIUM GRAINED	DARK GREY, WEAK ROCK.
148.32	0.51	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
148.43	0.11	100		100% SANDSTONE,COARSE GRAINED	DARK GREY, MODERATELY WEAK ROCK.
149.01	0.58	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEAK ROCK.
149.07	0.06	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: WITH ABUNDANT MUDSTONE PEBBLES
149.11	0.04	100		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.40	0.29	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: WITH ABUNDANT MUDSTONE PEBBLES
149.44	0.04	100		100% MUDSTONE	GREY, WEAK ROCK.
149.57	0.13	100		100% SANDSTONE	VERY COARSE GRAINED, GREY, MODERATELY WEAK ROCK.
149.65	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH NORMAL GRADED BEDDING.
149.84	0.19	100		100% SANDSTONE	VERY COARSE GRAINED, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
149.87	0.03	100		100% SANDSTONE,FINE GRAINED	GREY, WEAK ROCK.
150.49	0.62	100		100% SANDSTONE	VERY COARSE GRAINED, GREY, MODERATELY WEAK ROCK.
150.70	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, WEAK ROCK.
151.15	0.45	100		100% SANDSTONE	VERY COARSE GRAINED, GREY, MODERATELY WEAK ROCK.
					NOTE: WITH ABUNDANT MUDSTONE PEBBLES AND COAL LENSES
154.25	3.10	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
154.35	0.10	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
154.43	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
158.74	4.31	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
159.00	0.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
159.06	0.06	100		100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
159.09	0.03	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: WITH MUDSTONE AND CARBONACEOUS FRAGMENTS
159.25	0.16	100		100% MUDSTONE	GREY, VERY STRONG ROCK.
					NOTE: SILICIFIED
159.61	0.36	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, MODERATELY WEAK ROCK.
164.25	4.64	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
167.16	2.91	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
167.56	0.40	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
					NOTE: WITH NUMEROUS MUDSTONE PEBBLES
167.91	0.35	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
169.85	1.94	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
171.76	1.91	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
172.61	0.85	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
172.76	0.15	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY STRONG ROCK.
173.29	0.53	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
173.34	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS.
173.55	0.21	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
173.62	0.07	100		100% CARBONACEOUS SHALE	
176.70	3.08	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
177.24	0.54	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, STRONG ROCK.
178.33	1.09	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
178.80	0.47	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
179.11	0.31	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, STRONG ROCK.
179.34	0.23	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, STRONG ROCK. NOTE: WITH ABUNDANT MUDSTONE PEBBLES
179.68	0.34	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
182.00	2.32	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH NUMEROUS COAL LENSES AND MUDSTONE FRAGMENTS
182.24	0.24	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH NUMEROUS MUDSTONE PEBBLES AND CARBONACEOUS LENSES
182.34	0.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
182.79	0.45	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH ABUNDANT CARBONACEOUS LENSES
183.09	0.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
183.22	0.13	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES
183.34	0.12	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
183.90	0.56	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES
185.54	1.64	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
185.70	0.16	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH LARGE MUDSTONE LENSES

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
187.70	2.00	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, BEDS DIP 5 DEG.
190.96	3.26	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: VERY COARSE GRAINED IN PART
191.00	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
191.01	0.01	100		100% COAL, HEAVY DULL	
191.25	0.24	100		100% CARBONACEOUS SHALE	
191.35	0.10	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
192.28	0.93	100		100% MUDSTONE	GREY, WEAK ROCK, THICKLY LAMINATED.
192.42	0.14	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
192.43	0.01	100		100% CARBONACEOUS SHALE	
192.46	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY STRONG ROCK.
				TOP OF DALMAYNE D UPPER : 257.54 M R.L.	
192.54	0.08	100		100% COAL, HEAVY DULL	
192.70	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY STRONG ROCK.
192.78	0.08	100		100% COAL, DULL	
192.92	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY STRONG ROCK.
193.19	0.27	100		100% COAL, HEAVY DULL	
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.73 M; SAMPLED THICKNESS= 0.00 M	
193.27	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY STRONG ROCK.
194.09	0.82	100		100% MUDSTONE	GREY, WEAK ROCK.
194.92	0.83	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
195.56	0.64	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
196.10	0.54	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
196.60	0.50	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
196.90	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
197.09	0.19	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
197.18	0.09	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
197.56	0.38	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
197.91	0.35	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
199.29	1.38	100		100% SANDSTONE	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, WITH CROSS LAMINATION. NOTE: GRADING FROM FINE TO COARSE GRAINED
199.54	0.25	100		100% SILTSTONE	GREY, WEAK ROCK.
199.68	0.14	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, WEAK ROCK.
199.78	0.10	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
200.80	1.02	100		80% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE	CARBONACEOUS, LENSES, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
200.95	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
201.05	0.10	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
201.13	0.08	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
201.42	0.29	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
201.48	0.06	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
201.57	0.09	100		50% SILTSTONE 50% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
201.63	0.06	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
201.78	0.15	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
201.93	0.15	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
203.15	1.22	100		50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	CARBONACEOUS, LENSES, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
203.30	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
203.51	0.21	100		70% SANDSTONE,MEDIUM GRAINED 30% SILTSTONE	CARBONACEOUS, LENSES, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
203.76	0.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
204.20	0.44	100		80% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
205.10	0.90	0		CORE LOSS	NOTE: LITTLE RECOVERY - PEBBLES OF GREY SILTSTONE, DARK GREY AND DARK BROWN MUDSTONES, AND SOFT, BUFF COLOURED CLAYSTONE
205.30	0.20	0		CORE LOSS	
				TOP OF DALMAYNE D LOWER : 244.70 M R.L.	
205.34	0.04	100	1	100% COAL, DULL	
205.37	0.03	100	1	100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
205.43	0.06	100	1	100% COAL, HEAVY DULL	JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
205.53	0.10	100	1	100% COAL, DULL	
205.87	0.34	100	1	100% COAL, HEAVY DULL	
206.07	0.20	100	1	100% COAL, DULL	
206.34	0.27	100	1	100% COAL, HEAVY DULL	
206.36	0.02	100	1	100% COAL, BRIGHT	VERY CLOSE JOINT SPACING, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
206.77	0.41	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
206.98	0.21	100	1	100% COAL, DULL	
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.68 M; SAMPLED THICKNESS= 1.68 M	
207.08	0.10	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
207.12	0.04	100	2	100% MUDSTONE	CARBONACEOUS, DARK GREY.
207.24	0.12	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
207.39	0.15	100		100% SILTSTONE	BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
207.64	0.25	100		100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY WEAK ROCK.
208.22	0.58	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
209.14	0.92	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
210.81	1.67	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
218.98	8.17	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH LARGE MUDSTONE LENSES AT 218 M
219.12	0.14	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK, WITH LOAD CASTS.
236.51	17.39	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: GRADING TO VERY COARSE IN PART, OCCASIONAL BANDS OF MUDSTONE PEBBLES AND CARBONACEOUS LENSES
236.55	0.04	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
236.65	0.10	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH NUMEROUS COAL LENSES AND MUDSTONE FRAGMENTS
237.70	1.05	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
238.21	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
238.29	0.08	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
238.44	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
238.46	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
240.23	1.77	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
240.49	0.26	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
241.21	0.72	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
249.31	8.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS. NOTE: OCCASIONAL CROSS BEDDED INTERVALS
249.57	0.26	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
249.84	0.27	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH NUMEROUS CARBONACEOUS LENSES
250.69	0.85	100		100% CLAYSTONE	GREY, MODERATELY WEAK ROCK.
251.00	0.31	100		50% MUDSTONE 50% MUDSTONE	DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH BURROWING, WITH RIPPLES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
251.58	0.58	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
252.55	0.97	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
252.73	0.18	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
253.08	0.35	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
253.40	0.32	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
254.18	0.78	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
254.20	0.02	100	3	100% MUDSTONE	GREY.
254.28	0.08	100	3	100% CARBONACEOUS SHALE	
				TOP OF DALMAYNE E2 : 195.72 M R.L.	
254.40	0.12	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
254.46	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK.
254.87	0.41	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
254.89	0.02	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN.
255.11	0.22	100	4	100% COAL, DULL	
255.15	0.04	100	4	100% COAL, HEAVY DULL	
255.32	0.17	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
255.37	0.05	100	4	100% MUDSTONE	CARBONACEOUS, DARK GREY.
255.39	0.02	100	4	100% SANDSTONE	COALY, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
255.43	0.04	100	4	100% MUDSTONE	CARBONACEOUS, DARK GREY.
255.59	0.16	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
255.62	0.03	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, WITH NODULES OF SIDERITE.
255.77	0.15	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
255.80	0.03	100	4	100% MUDSTONE	CARBONACEOUS.
255.95	0.15	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS, WITH MINOR CALCITE.
255.96	0.01	100	4	100% CARBONACEOUS SHALE	
256.05	0.09	100	4	100% COAL, DULL	WITH MINOR CALCITE.
256.06	0.01	100	4	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN.
256.16	0.10	100	4	100% COAL, DULL	WITH TRACES OF CALCITE.
256.18	0.02	100	4	100% COAL, BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.30	0.12	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS.
256.32	0.02	100	4	100% COAL, HEAVY DULL	
256.33	0.01	100	4	100% MUDSTONE	BROWN.
256.35	0.02	100	4	100% COAL, BRIGHT	WITH ABUNDANT CALCITE.
256.41	0.06	100	4	100% COAL, BRIGHT WITH FEW DULL BANDS	WITH ABUNDANT CALCITE.
256.43	0.02	100	4	100% COAL, DULL	
256.48	0.05	100	4	100% COAL, HEAVY DULL	
				BASE OF DALMAYNE E2 : THICKNESS= 2.20 M; SAMPLED THICKNESS= 2.20 M	
256.50	0.02	100	5	100% MUDSTONE	BROWN.
256.60	0.10	100	5	100% MUDSTONE	CARBONACEOUS, DARK GREY.
256.64	0.04	100	5	100% CARBONACEOUS SHALE	COALY, LENSES.
256.82	0.18	100		100% MUDSTONE	GREY.
256.84	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
256.96	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS, WITH CALCITE ON CLEAT.
257.00	0.04	0		CORE LOSS	
257.01	0.01	100		100% COAL, BRIGHT	
257.23	0.22	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
257.32	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
257.55	0.23	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
257.83	0.28	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	CARBONACEOUS, STREAKS, GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
258.08	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
258.26	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
258.34	0.08	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK. NOTE: WITH ABUNDANT CARBONACEOUS STREAKS
258.40	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, DARK BROWN, WEAK ROCK.
258.68	0.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
258.72	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
258.96	0.24	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
258.99	0.03	100		100% CARBONACEOUS SHALE	
259.00	0.01	100		100% CLAYSTONE	LIGHT BROWN, STIFF.
259.18	0.18	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
259.21	0.03	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, BROWN, STIFF.
259.79	0.58	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
260.17	0.38	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
261.13	0.96	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
261.52	0.39	100		100% MUDSTONE	SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
261.81	0.29	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
261.95	0.14	100		50% MUDSTONE 50% SANDSTONE,COARSE GRAINED	DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
262.02	0.07	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
262.05	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
262.09	0.04	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
262.13	0.04	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. DARK GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
262.43	0.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
262.59	0.16	100		70% MUDSTONE 30% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, DARK GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH LOAD CASTS.
262.77	0.18	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
264.60	1.83	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: VERY COARSE GRAINED IN PART, WITH BANDS CONTAINING ABUNDANT CARBONACEOUS MATERIAL AND OCCASIONAL BANDS OF MUDSTONE FRAGMENTS
268.14	3.54	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, FRIABLE, LIGHT GREY, MODERATELY WEAK ROCK.
272.57	4.43	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
					NOTE: GRADING FROM MEDIUM TO VERY COARSE GRAINED
273.39	0.82	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
273.41	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
273.43	0.02	100		100% COAL, HEAVY DULL	
273.48	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
273.80	0.32	100		100% CARBONACEOUS SHALE	
274.44	0.64	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
275.50	1.06	100		50% SILTSTONE 50% SANDSTONE	DARK GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
276.90	1.40	100		100% SANDSTONE	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: GRADING FROM MEDIUM TO COARSE GRAINED, WITH NUMEROUS BANDS AND LENSES OF CARBONACEOUS MATERIAL
277.15	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
277.53	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
278.06	0.53	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
278.36	0.30	100		100% CARBONACEOUS SHALE	
278.38	0.02	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, BROWN, STIFF.
278.43	0.05	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
278.66	0.23	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
278.74	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
278.82	0.08	100		100% SANDSTONE	VERY FINE GRAINED, GREY-BROWN, MODERATELY WEAK ROCK.
279.07	0.25	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
279.08	0.01	100		100% CLAYSTONE	GREY-GREEN, FIRM.
279.16	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
279.17	0.01	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
279.85	0.68	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-BROWN, MODERATELY STRONG ROCK, THICKLY LAMINATED. NOTE: WITH AN 8 CM THICK BAND CONTAINING ABUNDANT MUDSTONE FRAGMENTS NEAR BASE
280.52	0.67	100		50% SILTSTONE 50% SANDSTONE	GREY. MED.-FINE GRAINED, GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
280.75	0.23	100		100% MUDSTONE	CARBONACEOUS, BLACK, STRONG ROCK.
280.80	0.05	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
281.88	1.08	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
282.20	0.32	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
282.24	0.04	100	6	100% MUDSTONE	CARBONACEOUS, DARK GREY, STRONG ROCK.
282.64	0.40	100	6	100% MUDSTONE	BLACK, STRONG ROCK.
				TOP OF DALMAYNE F : 167.36 M R.L.	
282.74	0.10	100	7	100% COAL, HEAVY DULL	
282.77	0.03	100	7	100% CARBONACEOUS SHALE	
282.81	0.04	100	7	100% COAL, HEAVY DULL	
283.08	0.27	100	7	100% COAL, HEAVY DULL	DULL COAL, BANDS.
283.11	0.03	100	7	100% MUDSTONE	DARK GREY, WITH NODULES OF SIDERITE.
283.52	0.41	100	7	100% COAL, HEAVY DULL	DULL COAL, BANDS.
				BASE OF DALMAYNE F : THICKNESS= 0.88 M; SAMPLED THICKNESS= 0.88 M	
283.55	0.03	100		100% CARBONACEOUS SHALE	
283.61	0.06	100		100% MUDSTONE	GREY-BROWN, VERY CLOSE JOINT SPACING, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
283.72	0.11	0		CORE LOSS	
283.74	0.02	100		100% MUDSTONE	COALY, LENSES, GREY.
283.77	0.03	100		100% SHALE	GREY, VERY WEAK ROCK.
284.68	0.91	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
284.83	0.15	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
285.42	0.59	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
285.47	0.05	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
285.57	0.10	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
291.50	5.93	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
291.85	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, EXTREMELY CLOSELY SPACED JOINTS.
295.51	3.66	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: GRADING TO VERY COARSE GRAINED AT BASE, IRREGULAR BASAL CONTACT DIPPING AT 60 DEG.
295.81	0.30	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
					NOTE: WITH ABUNDANT BANDS AND LENSES OF CARBONACEOUS MATERIAL, NUMEROUS MUDSTONE FRAGMENTS NEAR BASE
295.83	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
295.86	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	CARBONACEOUS, LAMINAE.
295.91	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
296.00	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
296.01	0.01	100		100% COAL, BRIGHT	
296.09	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
296.12	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
296.21	0.09	100		100% COAL, HEAVY DULL	DULL COAL, BANDS.
296.25	0.04	100		100% COAL, HEAVY DULL	
296.40	0.15	100		60% MUDSTONE 40% SILTSTONE	CARBONACEOUS, DARK BROWN. GREY. MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
296.50	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY.
296.52	0.02	100		100% MUDSTONE	CARBONACEOUS.
296.69	0.17	100		100% CARBONACEOUS SHALE	
296.76	0.07	100		100% COAL, HEAVY DULL	
296.99	0.23	100		100% CARBONACEOUS SHALE	
297.07	0.08	100		50% MUDSTONE 50% SILTSTONE	CARBONACEOUS. GREY.
297.34	0.27	100		100% CARBONACEOUS SHALE	
297.38	0.04	100		100% COAL, DULL	
297.44	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
297.48	0.04	100		100% COAL, DULL	
297.62	0.14	100		100% CARBONACEOUS SHALE	
298.10	0.48	100		100% MUDSTONE	SANDSTONE, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
299.39	1.29	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	GREY. GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
299.92	0.53	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
299.94	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
300.13	0.19	100		100% COAL, HEAVY DULL	
300.15	0.02	100		100% MUDSTONE	BLACK, MODERATELY WEAK ROCK.
300.39	0.24	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
300.67	0.28	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
301.67	1.00	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
302.21	0.54	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
302.61	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
303.21	0.60	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
303.37	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
303.47	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
304.44	0.97	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
304.54	0.10	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
307.54	3.00	100		100% SILTSTONE	SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK. NOTE: INTERLENSING AT BASAL CONTACT
308.23	0.69	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK. NOTE: WITH NUMEROUS BANDS AND LENSES OF CARBONACEOUS MATERIAL
308.60	0.37	100		70% SANDSTONE,MEDIUM GRAINED 30% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
309.28	0.68	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
309.43	0.15	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, WITH CROSS LAMINATION.
309.58	0.15	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY-BROWN. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
309.78	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
309.79	0.01	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
309.91	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
309.95	0.04	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
309.99	0.04	100		100% CARBONACEOUS SHALE	MUDSTONE, LAMINAE.
310.04	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
310.08	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
310.09	0.01	100		100% COAL, HEAVY DULL	
310.10	0.01	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
310.11	0.01	100		100% COAL, HEAVY DULL	
310.22	0.11	100		100% COAL, DULL	CARBONACEOUS, LAMINAE.
310.23	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
310.82	0.59	100		100% CLAYSTONE	GREY, MODERATELY WEAK ROCK.
311.19	0.37	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
311.45	0.26	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS. NOTE: GRADATIONAL BASAL BOUNDARY
311.70	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
311.72	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK. NOTE: WITH COARSE QUARTZ GRAINS
311.96	0.24	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
312.14	0.18	100		100% SILTSTONE	SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
312.54	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS. NOTE: SHEARED IN TOP 15 CM, COARSE SANDSTONE LENSE AT BASE, INTER LENSING AT BASAL CONTACT
312.74	0.20	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
312.88	0.14	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
314.00	1.12	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK BROWN. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
314.36	0.36	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK. NOTE: WITH NUMEROUS CARBONACEOUS BANDS AND LENSES
314.68	0.32	100		50% SANDSTONE,COARSE GRAINED 50% MUDSTONE	COALY, LENSES, LIGHT GREY. CARBONACEOUS, DARK BROWN. MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
317.29	2.61	100		100% SANDSTONE	MODERATELY STRONG ROCK. NOTE: GRADING FROM FINE (GREY) TO VERY COARSE (LIGHT GREY) WITH P EBBLE SIZE QUARTZ GRAINS IN BASAL 47 CM
317.39	0.10	100		100% PEBBLE CONGLOMERATE	STRONG ROCK. NOTE: QUARTZ PEBBLES IN GREEN FINE SAND MATRIX
317.64	0.25	100		100% SILTSTONE	GREEN, MODERATELY WEAK ROCK.
321.83	4.19	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: FRACTURED ZONE FROM 317.90 TO 318.15 M
322.49	0.66	100		100% LIMESTONE	LIGHT GREY, VERY STRONG ROCK.
335.00	12.51	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: WITH BANDS CONTAINING NUMEROUS CALCITE VEINS, FRACTURED ZON E FROM 330.5M TO 331.5M,SCATTERED SAND SIZE QUARTZ GRAINS

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	105.26 - 115.43 M	10.17 M
DC	0.00 M	130.35 - 132.21 M	1.86 M
DC	0.00 M	132.22 - 132.34 M	0.12 M
DC	0.00 M	132.39 - 132.78 M	0.39 M
DC	0.00 M	133.03 - 133.21 M	0.18 M
DC	0.00 M	133.23 - 133.26 M	0.03 M
DC	0.00 M	133.27 - 133.29 M	0.02 M
DC	0.00 M	133.30 - 133.41 M	0.11 M
DC	0.00 M	133.42 - 133.47 M	0.05 M
DC	0.00 M	133.64 - 133.76 M	0.12 M
DC	0.00 M	133.80 - 133.81 M	0.01 M
DC	0.00 M	133.82 - 133.86 M	0.04 M
DC	0.00 M	133.96 - 133.97 M	0.01 M
DC	0.00 M	134.00 - 134.06 M	0.06 M
DC	0.00 M	134.07 - 134.52 M	0.45 M
DDU	0.00 M	192.46 - 193.19 M	0.73 M
DDL	1.68 M	205.30 - 206.98 M	1.68 M
DE2	2.20 M	254.28 - 256.48 M	2.20 M
DF	0.88 M	282.64 - 283.52 M	0.88 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	205.30 - 206.98 M	1.68 M
2	206.98 - 207.12 M	0.14 M
3	254.18 - 254.28 M	0.10 M
4	254.28 - 256.48 M	2.20 M
5	256.48 - 256.64 M	0.16 M
6	282.20 - 282.64 M	0.44 M
7	282.64 - 283.52 M	0.88 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 2

HOLE TYPE	CORE	
EASTING	600,050 M	GRID
NORTHING	5,382,600 M	GRID
ELEVATION	475.00 M	
TOTAL DEPTH DRILLED	409.91 M	
DRILLING STARTED	7/ 6/78	
DRILLING TIME	21 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
16.70	16.70	70		100% DOLERITE	FERRUGINOUS, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: WITH MNO2 STAINING ALONG JOINTS, CONTAINING NUMEROUS SLIGHTLY WEATHERED DOLERITE BOULDERS
27.45	10.75	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, SLIGHTLY WEATHERED, STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
30.70	3.25	100		100% DOLERITE	GREY-GREEN, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
31.00	0.30	80		100% DOLERITE	BADLY BROKEN, DARK GREEN, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
37.00	6.00	100		100% DOLERITE	GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
38.00	1.00	20		100% DOLERITE	GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
38.70	0.70	100		100% DOLERITE	GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
39.50	0.80	90		100% DOLERITE	GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
40.00	0.50	100		100% DOLERITE	GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
48.40	8.40	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: DIP OF JOINTS VARIABLE
49.00	0.60	100		100% DOLERITE	GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
55.05	6.05	100		100% DOLERITE	GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: DIP OF JOINTS VARIABLE
55.15	0.10	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: DIP OF JOINTS VARIABLE

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
56.70	1.55	100		100% DOLERITE	GREY, WITH CALCITE, VERY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
57.60	0.90	100		100% DOLERITE	GREY, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
77.20	19.60	100		100% DOLERITE	GREY, WITH CALCITE, VERY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
					NOTE: TWO SETS OF JOINTS DIPPING AT 30 DEG. AND 70 DEG.
78.95	1.75	100		100% DOLERITE	GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
85.00	6.05	100		100% DOLERITE	GREY, WITH CALCITE, VERY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
					NOTE: TWO SETS OF JOINTS DIPPING AT 30 DEG. AND 70 DEG.
88.10	3.10	100		100% DOLERITE	GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
92.80	4.70	100		100% DOLERITE	GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
101.00	8.20	100		100% DOLERITE	GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
110.90	9.90	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, WITH CHLORITE ON JOINTS AND MICA, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
111.80	0.90	100		100% DOLERITE	GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
113.80	2.00	100		100% DOLERITE	BADLY BROKEN, GREY-GREEN, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
144.55	30.75	100		100% DOLERITE	GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
145.25	0.70	100		100% DOLERITE	FINE GRAINED, STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
					NOTE: CHILLED BASAL CONTACT, CONTAINS LARGE CHLORITE? GRAINS
146.08	0.83	100		100% MUDSTONE	GREY-GREEN, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
					NOTE: WITH BANDS CONTAINING DARK GREY MUDSTONE? FRAGMENTS ORIENTED ALONG BEDDING

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
146.43	0.35	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
147.08	0.65	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, . NOTE: WITH BANDS CONTAINING DARK GREY MUDSTONE? FRAGMENTS ORIENTED ALONG BEDDING
148.75	1.67	100		100% CLAYSTONE	FERRUGINOUS, STAINING, DARK GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: IRREGULAR VOIDS INFILLED WITH CHLORITE?
149.05	0.30	100		100% CLAYSTONE	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: ELONGATED FRAGMENTS OF SECONDARY MINERAL ALONG BEDDING
149.33	0.28	100		100% CLAYSTONE	DARK GREY, MODERATELY STRONG ROCK, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: WITH BANDS CONTAINING BLACK SECONDARY MINERAL FRAGMENTS
149.56	0.23	100		100% MUDSTONE	FERRUGINOUS, STAINING, LIGHT GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, . NOTE: WITH BANDS CONTAINING BLACK SECONDARY MINERAL FRAGMENTS
150.01	0.45	100		100% CLAYSTONE	DARK BROWN, WITH CHLORITE ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
150.63	0.62	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
151.04	0.41	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CLAY ON JOINTS, STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
153.75	2.71	100		40% MUDSTONE 35% MUDSTONE 25% MUDSTONE	LIGHT BROWN. LIGHT GREEN. BUFF. MODERATELY STRONG ROCK, THINLY BEDDED. NOTE: WITH BAND OF DARK GREEN FRAGMENTS AT 152.10M.
160.10	6.35	100		90% MUDSTONE 10% MUDSTONE	DARK GREY. BUFF. MODERATELY STRONG ROCK, THINLY BEDDED. NOTE: EXHIBITS FERRUGINOUS STAINING, BAKED APPEARENCE, SILICA REMOBILISATION, SECONDARY MINERAL (CHLORITE) FORMATION
160.90	0.80	100		70% MUDSTONE 20% MUDSTONE 10% MUDSTONE	LIGHT GREY. GREY. BUFF. MODERATELY STRONG ROCK, THINLY BEDDED. NOTE: EXHIBITS FERRUGINOUS STAINING, BAKED APPEARENCE, SILICA REMOBILISATION, SECONDARY MINERAL (CHLORITE) FORMATION
161.50	0.60	100		100% MUDSTONE	FERRUGINOUS, STAINING, LIGHT GREEN, MODERATELY STRONG ROCK. NOTE: WITH BANDS OF DARK GREEN (CHLORITE?) NODULES

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
162.95	1.45	100		100% MUDSTONE	LIGHT GREEN, WITH CLAY ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
163.15	0.20	100		100% MUDSTONE	GREY, WITH CLAY ON JOINTS, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
163.19	0.04	100		100% CARBONACEOUS SHALE	
163.68	0.49	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, TIGHT NON PLANAR, INFILLED WITH CALCITE.
163.70	0.02	100		100% MUDSTONE	LIGHT GREY, STIFF.
163.98	0.28	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
164.02	0.04	100		100% COAL, HEAVY DULL	
164.06	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
164.20	0.14	100		100% CLAYSTONE	GREY, MODERATELY WEAK ROCK.
164.46	0.26	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
164.94	0.48	100		100% MUDSTONE	BRIGHT COAL, LENSES, BLACK, MODERATELY STRONG ROCK, TIGHT NON PLANAR, INFILLED WITH CALCITE.
164.95	0.01	100		100% CLAYSTONE	GREY, STIFF.
165.17	0.22	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
165.20	0.03	100		100% COAL, BRIGHT	WITH CALCITE ON CLEAT.
165.22	0.02	100		100% CARBONACEOUS SHALE	
165.23	0.01	100		100% COAL, BRIGHT	WITH CALCITE ON CLEAT.
165.44	0.21	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
165.47	0.03	100		100% COAL, BRIGHT	WITH CALCITE ON CLEAT.
165.75	0.28	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
165.87	0.12	100		100% MUDSTONE	GREY, SOFT.
165.94	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
165.96	0.02	100		100% COAL, BRIGHT	CARBONACEOUS, LAMINAE, MODERATELY STRONG ROCK.
168.46	2.50	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
168.57	0.11	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
168.58	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
168.65	0.07	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
168.83	0.18	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
169.11	0.28	100		100% MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
169.44	0.33	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
169.68	0.24	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
169.86	0.18	0		CORE LOSS	NOTE: CORE LOSS
169.90	0.04	70		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
169.91	0.01	100		100% CLAYSTONE	DARK GREY, SOFT.
169.98	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
170.00	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
170.06	0.06	100		100% MUDSTONE	BRIGHT COAL, BANDS, BLACK.
170.75	0.69	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
170.95	0.20	100		100% MUDSTONE	BRIGHT COAL, LENSES, BLACK.
174.35	3.40	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, STRONG ROCK, THINLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
175.52	1.17	100		100% SILTSTONE	MUDSTONE, FRAGMENTS, LIGHT GREY, STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES. NOTE: GRADATIONAL INTO SANDSTONE BELOW
180.85	5.33	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, STRONG ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, WIDELY SPACED JOINTS, TIGHT NON PLANAR, . NOTE: CONGLOMERATE PEBBLES MORE PREVALENT TOWARDS THE BASE
182.35	1.50	100		100% COBBLE CONGLOMERATE	LIGHT GREY, MODERATELY STRONG ROCK. NOTE: SHARP CONTACT WITH SANDSTONE ABOVE
183.20	0.85	100		99% SANDSTONE 1% MUDSTONE	COALY, FRIABLE, LIGHT GREY. STREAKS. STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
183.90	0.70	100		98% SANDSTONE 2% MUDSTONE	MED.-FINE GRAINED, BROWN. LENSES. STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
184.15	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT.
184.55	0.40	100		100% CLAYSTONE	GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
184.85	0.30	100		100% MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
191.00	6.15	100		100% SILTSTONE	SANDSTONE, BANDS, LIGHT GREY, WITH CLAY ON JOINTS, MODERATELY STRONG ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
191.85	0.85	100		100% SILTSTONE	MUDSTONE, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
195.93	4.08	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, STREAKS, LIGHT GREY, STRONG ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, WIDELY SPACED JOINTS, TIGHT NON PLANAR, .
198.72	2.79	100		70% MUDSTONE 30% SANDSTONE	ARENACEOUS, DARK BROWN. MUDSTONE, LENSES, GREY. MODERATELY STRONG ROCK.
				NOTE: GREENISH	COARSER PEBBLY FRAGMENTS TOWARDS THE BASE
201.10	2.38	100		100% MUDSTONE	GREY-GREEN, MODERATELY STRONG ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT.
201.70	0.60	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT.
204.25	2.55	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
206.10	1.85	100		95% MUDSTONE 5% CLAY	CARBONACEOUS, BLACK. LENSES. MODERATELY STRONG ROCK.
212.78	6.68	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
				NOTE: ALTERNATING MUDSTONE AND SANDSTONE TOWARDS THE BASE	
215.94	3.16			100% SANDSTONE	MED.-COARSE GRAINED, FELDSPATHIC, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
216.16	0.22			100% CLAYSTONE	COALY, STREAKS, DARK BROWN, MODERATELY WEAK ROCK.
217.77	1.61			100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, STRONG ROCK.
227.38	9.61			70% SANDSTONE 30% SILTSTONE	MUDSTONE, STREAKS, LIGHT GREY. STRONG ROCK, MEDIUM BEDDED, VERY WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
				NOTE: SEQUENCE	OF ALTERNATING SANDSTONE AND SILTSTONE
227.40	0.02			100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
227.48	0.08			100% SANDSTONE	LIGHT GREY, STRONG ROCK.
227.65	0.17			100% MUDSTONE	COALY, MODERATELY STRONG ROCK.
233.50	5.85			70% SILTSTONE 30% SANDSTONE	COALY, LENSES, LIGHT GREY. LIGHT GREY. STRONG ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: SILTSTONE SANDSTONE SEQUENCE
233.60	0.10			100% CLAY	CALCITIC, BUFF, FIRM.
234.90	1.30			100% MUDSTONE	LIGHT BROWN, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, TIGHT NON PLANAR, .
235.90	1.00			100% SANDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY STRONG ROCK.
236.40	0.50			100% SANDSTONE	MEDIUM GRAINED, CALCITIC, LIGHT GREY, STRONG ROCK.
238.45	2.05			100% SILTSTONE	CALCITIC, GREY, STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES.
242.00	3.55			100% MUDSTONE	CONGLOMERATIC, LOWER CONTACT, BROWN, WITH CALCITE ON JOINTS, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: COARSER CONGLOMERITIC OVER LAST 50CM AND BASE 5CM IS A CONGLOMERATE
243.40	1.40			100% MUDSTONE	SILTSTONE, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
243.90	0.50			100% MUDSTONE	CHLORITIC, SILTSTONE, GREY, STRONG ROCK.
244.35	0.45			100% SANDSTONE	ARGILLACEOUS, BUFF, MODERATELY WEAK ROCK.
250.30	5.95			100% SILTSTONE	SANDSTONE, LAMINAE, LIGHT GREY, STRONG ROCK, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES.
256.84	6.54			100% SANDSTONE	MEDIUM GRAINED, COALY, LIGHT GREY, STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
256.94	0.10			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
257.00	0.06			100% CLAYSTONE	MUDSTONE, BANDS, BUFF, MODERATELY WEAK ROCK.
257.05	0.05			100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
257.45	0.40			100% MUDSTONE	COALY, STREAKS, GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT.
257.95	0.50			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
258.50	0.55			100% SANDSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
259.05	0.55			100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
					NOTE: COAL FRAGMENTS IN TOP 5CM
259.73	0.68			100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT.
259.80	0.07		1	100% CLAYSTONE	CHLORITIC, BUFF, WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
		TOP OF	DALMAYNE B : 215.20 M R.L.		
259.90	0.10	80	2	100% MUDSTONE	BRIGHT COAL, LAMINAE, BLACK, MODERATELY STRONG ROCK.
260.00	0.10	0	2	CORE LOSS	
260.44	0.44	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
260.49	0.05	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
260.62	0.13	100	3	100% CLAYSTONE	CARBONACEOUS, STREAKS, BUFF, FIRM.
260.70	0.08	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
260.73	0.03	100	3	100% SILTSTONE	GREY-BROWN, MODERATELY STRONG ROCK.
260.87	0.14	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
260.98	0.11	100	3	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
261.01	0.03	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
261.04	0.03	100	3	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
261.39	0.35	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
261.68	0.29	100	3	100% MUDSTONE	CARBONACEOUS, BANDS, BUFF, STIFF.
261.97	0.29	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
262.29	0.32	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN.
262.30	0.01	100	4	100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY WEAK ROCK.
262.40	0.10	100	4	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
262.42	0.02	100	4	100% MUDSTONE	BRIGHT COAL, LENSES, BLACK, MODERATELY STRONG ROCK.
262.43	0.01	100	4	100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
262.51	0.08	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
262.52	0.01	100	4	100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
262.72	0.20	100	4	100% COAL, DULL WITH FEW BRIGHT BANDS	
262.88	0.16	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
262.94	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
262.96	0.02	100	4	100% COAL, BRIGHT	
262.98	0.02	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
262.99	0.01	100	5	100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY STRONG ROCK.
263.25	0.26	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: WITH ABUNDANT SILICIFIED ROOTLETS IN TOP 3 CM.
263.40	0.15	100	5	100% MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY STRONG ROCK.
263.47	0.07	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.51	0.04	100	5	100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY STRONG ROCK.
264.09	0.58	100	5	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, MODERATELY STRONG ROCK.
264.12	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY STRONG ROCK.
264.26	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
264.35	0.09	100		100% MUDSTONE	BRIGHT COAL, STREAKS, DARK GREY, MODERATELY STRONG ROCK.
				BASE OF DALMAYNE B : THICKNESS= 4.55 M; SAMPLED THICKNESS= 4.29 M	
266.31	1.96			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT.
267.44	1.13			100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, STRONG ROCK.
267.76	0.32			100% SILTSTONE	LIGHT GREY, STRONG ROCK.
271.90	4.14			100% SANDSTONE	MICACEOUS, LIGHT GREY, STRONG ROCK, VERY WIDELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE.
272.35	0.45			100% MUDSTONE	SHALY, COALY, DARK BROWN, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
281.16	8.81			100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, MODERATELY STRONG ROCK, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES.
288.47	7.31			100% SANDSTONE	COALY, STREAKS, LIGHT GREY, STRONG ROCK. NOTE: COAL STREAKS INCREASING TOWARDS BASE
				TOP OF DALMAYNE C : 186.53 M R.L.	
288.49	0.02		6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
288.50	0.01	100	6	100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY STRONG ROCK.
288.54	0.04	100	6	100% COAL, HEAVY DULL	
288.55	0.01	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
288.57	0.02	100	6	100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
288.59	0.02	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
288.61	0.02	100	6	100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY STRONG ROCK.
288.63	0.02	100	6	100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
288.65	0.02	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
288.68	0.03	0	6	CORE LOSS	
288.85	0.17	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
288.89	0.04	0	6	CORE LOSS	
289.10	0.21	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
289.14	0.04	0	6	CORE LOSS	
289.28	0.14	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
289.31	0.03	0	6	CORE LOSS	
289.34	0.03	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.35	0.01	100	6	100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
289.38	0.03	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.48	0.10	100	7	100% COAL, HEAVY DULL	
289.51	0.03	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	
289.61	0.10	100	7	100% COAL, HEAVY DULL	
289.64	0.03	100	7	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
289.65	0.01	100	7	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.78	0.13	100	7	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.84	0.06	100	7	100% COAL, INTERBANDED DULL AND BRIGHT	CARBONACEOUS, LAMINAE.
289.86	0.02	100	7	100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
289.87	0.01	100	7	100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
290.00	0.13	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
290.20	0.20	100	7	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.35	0.15	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	HEAVY DULL COAL, LAMINAE.
290.37	0.02	100	7	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.53	0.16	100	7	100% COAL, HEAVY DULL	
290.60	0.07	100	7	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
290.64	0.04	100	7	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.80	0.16	100	7	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
290.81	0.01	100	7	100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
290.93	0.12	100	7	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
291.07	0.14	100	8	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
291.22	0.15	100	8	100% COAL, HEAVY DULL	
291.23	0.01	100	8	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
291.26	0.03	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
291.38	0.12	100	8	100% COAL, HEAVY DULL	
291.47	0.09	100	8	100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
291.49	0.02	100	8	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
291.54	0.05	100	8	100% COAL, HEAVY DULL	
291.56	0.02	100	8	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
291.57	0.01	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
291.58	0.01	100	8	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
291.61	0.03	100	8	100% COAL, HEAVY DULL	
291.62	0.01	100	8	100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
291.63	0.01	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
291.64	0.01	100	8	100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
291.69	0.05	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
291.75	0.06	100	8	100% COAL, HEAVY DULL	
291.81	0.06	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
291.84	0.03	100	8	100% COAL, BRIGHT	
				BASE OF DALMAYNE C : THICKNESS= 3.37 M; SAMPLED THICKNESS= 3.37 M	
291.88	0.04	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
291.89	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
291.91	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
291.98	0.07	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
292.00	0.02	100		100% MUDSTONE	BRIGHT COAL, STREAKS, DARK GREY, MODERATELY WEAK ROCK.
292.02	0.02	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
292.07	0.05	100		100% MUDSTONE	BRIGHT COAL, STREAKS, DARK GREY, MODERATELY WEAK ROCK.
292.08	0.01	100		100% COAL, BRIGHT	CARBONACEOUS, LENSES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
292.14	0.06	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK GREY, MODERATELY WEAK ROCK.
292.36	0.22	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE C : 182.64 M R.L.	
292.38	0.02	100		100% COAL, BRIGHT	
				BASE OF DALMAYNE C : THICKNESS= 0.02 M; SAMPLED THICKNESS= 0.00 M	
293.85	1.47	100		100% MUDSTONE	COALY, STREAKS, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS. NOTE: GRADATIONAL INTO SANDSTONE BELOW
301.13	7.28	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, . NOTE: GRADING TO COARSER TOWARDS BASE
302.95	1.82	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
303.04	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
304.62	1.58	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, THINLY LAMINATED.
304.69	0.07	100		50% MUDSTONE 40% SANDSTONE 10% COAL	CARBONACEOUS. MODERATELY STRONG ROCK, BEDS DIP 7 DEG.
305.48	0.79	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, STRONG ROCK, MEDIUM BEDDED.
306.27	0.79	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, THICKLY LAMINATED.
310.70	4.43	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
310.83	0.13	100		80% MUDSTONE 20% SANDSTONE	CARBONACEOUS. COALY, BANDS. THICKLY LAMINATED.
311.22	0.39	100		100% SANDSTONE	CALCAREOUS, COALY, LIGHT GREY, STRONG ROCK.
311.32	0.10	100		100% MUDSTONE	CARBONACEOUS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
311.37	0.05	100		100% SANDSTONE	CONGLOMERATIC.
311.47	0.10	100		100% CLAY	FISSILE, BROWN, SOFT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
311.72	0.25	100		100% SANDSTONE	CONGLOMERATIC, STRONG ROCK, WITH MUD PELLETS.
311.88	0.16	100		100% SHALE	LIGHT GREY, MODERATELY STRONG ROCK.
313.36	1.48	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, LIGHT GREY, STRONG ROCK.
313.56	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, THICKLY LAMINATED.
314.81	1.25	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, STRONG ROCK.
317.00	2.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
319.94	2.94	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK. NOTE: GRADATIONAL INTO MEDIUM COARSE FROM SANDSTONE ABOVE
320.51	0.57	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK.
320.54	0.03	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY STRONG ROCK.
323.36	2.82	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, LIGHT GREY, STRONG ROCK, WITH PLANT REMAINS.
323.88	0.52	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
324.58	0.70	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
324.99	0.41	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, WITH MUD PELLETS.
325.68	0.69	100		100% MUDSTONE	COALY, STREAKS, LIGHT GREY, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
326.00	0.32	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS. NOTE: MUDSTONE PEBBLES ELONGATED IN DIRECTION OF BEDDING
326.10	0.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
326.15	0.05	100		100% SANDSTONE	CONGLOMERATIC, CALCAREOUS, STRONG ROCK, WITH MUD PELLETS.
329.27	3.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, STRONG ROCK, MEDIUM BEDDED. NOTE: GRADATIONAL INTO COARSE GRAINED BELOW
330.87	1.60	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, STRONG ROCK, THINLY BEDDED, WITH MUD PELLETS.
335.16	4.29	100		100% SANDSTONE	MED.-COARSE GRAINED, MICACEOUS, STRONG ROCK.
338.51	3.35	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
339.20	0.69	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
345.51	6.31	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
345.94	0.43	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
346.00	0.06	100	15	100% MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY STRONG ROCK.
346.09	0.09	100	15	100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
346.17	0.08	100	15	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
346.22	0.05	100	15	100% CLAYSTONE	BROWN, SOFT, WITH PLANT REMAINS.
		TOP OF	DALMAYNE D UPPER : 128.78 M R.L.		
346.34	0.12	100	16	100% COAL, HEAVY DULL	
346.58	0.24	100	16	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
346.63	0.05	100	16	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
346.76	0.13	100	16	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
347.20	0.44	100	16	100% COAL, HEAVY DULL	
347.42	0.22	100	16	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
347.45	0.03	100	16	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
		BASE OF	DALMAYNE D UPPER : THICKNESS= 1.23 M; SAMPLED THICKNESS= 1.23 M		
347.88	0.43	100	17	100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
348.11	0.23	100	17	100% MUDSTONE	CARBONACEOUS, DARK GREY.
348.20	0.09	100	18	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
348.35	0.15	100	18	100% COAL, HEAVY DULL	
348.41	0.06	100	18	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
348.46	0.05	100	18	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
348.49	0.03	100	18	100% CARBONACEOUS SHALE	
348.52	0.03	100	18	100% COAL, DULL WITH FEW BRIGHT BANDS	
348.54	0.02	100	18	100% COAL, INTERBANDED DULL AND BRIGHT	
348.55	0.01	100	18	100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
349.25	0.70	100		100% MUDSTONE	FISSILE, GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
351.42	2.17	100		65% SANDSTONE 35% SILTSTONE	COALY, STREAKS. CARBONACEOUS, STREAKS. THINLY BEDDED.
353.81	2.39	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, STRONG ROCK, MEDIUM BEDDED.
355.56	1.75	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED.
357.06	1.50	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, STRONG ROCK, VERY THINLY BEDDED.
				TOP OF DALMAYNE D LOWER : 117.94 M R.L.	
357.08	0.02	100	9	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
357.60	0.52	100	9	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
357.69	0.09	100	9	100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS.
357.75	0.06	100	9	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
357.78	0.03	100	9	100% CARBONACEOUS SHALE	
357.84	0.06	100	9	100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
358.07	0.23	100	10	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
358.08	0.01	100	10	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
358.68	0.60	100	10	100% COAL, HEAVY DULL	
358.69	0.01	100	10	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
359.00	0.31	100	10	100% COAL, DULL	BRIGHT COAL, STREAKS.
359.76	0.76	100	10	100% COAL, DULL	MUDSTONE, LAMINAE.
359.81	0.05	100	10	100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
359.85	0.04	100	10	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
				BASE OF DALMAYNE D LOWER : THICKNESS= 2.79 M; SAMPLED THICKNESS= 2.79 M	
359.89	0.04	100	11	100% MUDSTONE	BRIGHT COAL, STREAKS, DARK BROWN, MODERATELY WEAK ROCK.
359.94	0.05	100	11	100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
360.52	0.58	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, MEDIUM BEDDED.
360.67	0.15	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
361.10	0.43	100		100% SILTSTONE	FISSILE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
367.07	5.97	100		100% SANDSTONE	MED.-COARSE GRAINED, MICACEOUS, GREY, STRONG ROCK, THICKLY BEDDED, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. .
376.61	9.54	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, THICKLY BEDDED, WITH MUD PELLETS.
				NOTE: MUDSTONE PEBBLES INCREASE IN LAST 10CM	
377.29	0.68	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
377.49	0.20	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
377.64	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
384.67	7.03	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, LIGHT GREY, STRONG ROCK, VERY THICKLY BEDDED, WITH MUD PELLETS.
384.71	0.04	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
389.20	4.49	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
389.35	0.15	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
				NOTE: SHARP IRREGULAR CONTACT WITH ABOVE SANDSTONE	
393.15	3.80	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
393.28	0.13	100		70% SANDSTONE,COARSE GRAINED 30% MUDSTONE	GREEN. CARBONACEOUS, DARK GREY. MODERATELY STRONG ROCK, THINLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CROSS LAMINATION, WITH LOAD CASTS.
394.81	1.53	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
395.67	0.86	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY BEDDED.
398.44	2.77	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY BEDDED.
399.14	0.70	100		100% SHALE	FISSILE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
399.68	0.54	100		40% MUDSTONE 30% SILTSTONE 30% SHALE	CARBONACEOUS, GREY. MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
400.11	0.43	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
400.27	0.16	100		100% CARBONACEOUS SHALE	BADLY BROKEN, VERY WEAK ROCK.
401.54	1.27	100		100% MUDSTONE	GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
402.41	0.87	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES. NOTE: FEW BRIGHT BANDS AND CARB SHALE LAYERS
402.81	0.40	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, THINLY LAMINATED.
403.28	0.47	100		100% SANDSTONE	LIGHT GREY, MODERATELY STRONG ROCK, THINLY BEDDED. NOTE: GRADES TO COARSE TOWARDS THE BASE
403.61	0.33	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
404.05	0.44	100		100% MUDSTONE	ARGILLACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
405.14	1.09	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED.
406.00	0.86	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
406.05	0.05	0		CORE LOSS	
406.22	0.17	100	12	100% MUDSTONE	CARBONACEOUS, BLACK.
406.25	0.03	100	12	100% MUDSTONE	GREY, SOFT.
406.32	0.07	100	12	100% MUDSTONE	CARBONACEOUS, BLACK.
406.42	0.10	100	12	100% CARBONACEOUS SHALE	
406.50	0.08	100	12	100% MUDSTONE	CARBONACEOUS, BLACK.
406.52	0.02	100	12	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
406.54	0.02	100	12	100% MUDSTONE	CARBONACEOUS, BLACK.
406.56	0.02	100	12	100% MUDSTONE	LIGHT BROWN, STIFF.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
				TOP OF DALMAYNE E2 : 68.44 M R.L.	
406.82	0.26	100	13	100% COAL, HEAVY DULL	
406.83	0.01	100	13	100% MUDSTONE	BROWN.
406.92	0.09	100	13	100% MUDSTONE	CARBONACEOUS, BLACK.
407.00	0.08	100	13	100% COAL, HEAVY DULL	
407.08	0.08	100	13	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
407.11	0.03	100	13	100% COAL, BRIGHT WITH FEW DULL BANDS	
407.19	0.08	100	13	100% CARBONACEOUS SHALE	
407.24	0.05	100	13	100% MUDSTONE	CARBONACEOUS, BROWN.
407.32	0.08	100	13	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE E2 : THICKNESS= 0.76 M; SAMPLED THICKNESS= 0.76 M	
407.71	0.39	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
408.06	0.35	100		100% CLAYSTONE	GREY, WEAK ROCK.
408.99	0.93	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
409.34	0.35	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH PLANT REMAINS.
412.58	3.24	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
413.99	1.41	100		65% MUDSTONE 20% SILTSTONE 15% SANDSTONE	CARBONACEOUS. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
414.22	0.23	100		50% COAL, HEAVY DULL 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. MODERATELY STRONG ROCK, THICKLY LAMINATED.
415.82	1.60	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH TROUGH CROSS BEDDING, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

NOTE: SHARP CONTACT WITH OVERLYING COAL SEQUENCE

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
416.05	0.23	100		100% CLAYSTONE	GREY, MODERATELY WEAK ROCK.
416.25	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
					NOTE: GRADATIONAL CONTACT INTO SILTSTONE
418.67	2.42	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS, WIDELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
					NOTE: ALSO ROUGH CALCITE INFILLED JOINTS AT 80D
419.27	0.60	100		100% MUDSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
419.53	0.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
422.00	2.47	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS.
422.43	0.43	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
423.36	0.93	100		60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
					NOTE: SANDSTONE DOMINATES TOWARDS THE BASE
424.37	1.01	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES.
424.56	0.19	100		55% SANDSTONE,COARSE GRAINED 45% MUDSTONE	COALY, STREAKS, GREY. CARBONACEOUS. MODERATELY WEAK ROCK, THINLY LAMINATED.
426.17	1.61	100		100% CLAYSTONE	WEAK ROCK, THINLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
426.29	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
426.72	0.43	100		100% MUDSTONE	COALY, STREAKS, BROWN, WEAK ROCK.
428.00	1.28	100		65% MUDSTONE 35% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
428.85	0.85	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CROSS LAMINATION.
					NOTE: COAL LENSES,STREAKS
429.38	0.53	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK, THICKLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
429.66	0.28	100		100% MUDSTONE	CARBONACEOUS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
430.27	0.61	100		100% MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
430.49	0.22	100		100% CLAYSTONE	FISSILE, BROWN, MODERATELY STRONG ROCK.
					NOTE: BADLY BROKEN AT BOTH CONTACTS
432.66	2.17	100		100% MUDSTONE	ARENACEOUS, LENSES, BROWN, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
					NOTE: CARB MUD CLASTS COMMON IN THE LAST 30CM
432.68	0.02	100		100% MUDSTONE	CARBONACEOUS, SIDERITIC, BLACK, STRONG ROCK.
				TOP OF DALMAYNE F : 42.32 M R.L.	
432.74	0.06	100	14	100% COAL, DULL	BRIGHT COAL, BANDS.
432.75	0.01	100	14	100% MUDSTONE	CARBONACEOUS, SIDERITIC, BLACK, STRONG ROCK.
432.81	0.06	100	14	100% COAL, DULL	BRIGHT COAL, BANDS.
432.85	0.04	100	14	100% MUDSTONE	CARBONACEOUS, SIDERITIC, BLACK, STRONG ROCK.
432.90	0.05	100	14	100% COAL, DULL	
433.18	0.28	80	14	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE F : THICKNESS= 0.50 M; SAMPLED THICKNESS= 0.50 M	
433.48	0.30	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
433.80	0.32	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
436.63	2.83	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK, VERY THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
437.93	1.30	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY STRONG ROCK, BEDS DIP 6 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
446.10	8.17	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, STRONG ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
					NOTE: SHARP CONTACT AT BASE WITH CARB MUDSTONE
446.16	0.06	100		100% COAL, DULL	BRIGHT COAL, LENSES.
446.42	0.26	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
446.54	0.12	100		100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
447.82	1.28	100		60% SANDSTONE 40% MUDSTONE	COALY, STREAKS, LIGHT GREY. CARBONACEOUS, DARK GREY. MODERATELY STRONG ROCK, THINLY LAMINATED, WITH MUD PELLETS, WITH CROSS LAMINATION.
447.85	0.03	100		100% MUDSTONE	BROWN, WEAK ROCK.
448.03	0.18	100		100% COAL, DULL	
448.05	0.02	100		100% CARBONACEOUS SHALE	
448.15	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
448.84	0.69	100		70% SILTSTONE 20% MUDSTONE 10% SANDSTONE	LIGHT GREY. BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
448.97	0.13	100		100% CLAYSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
449.30	0.33	100		100% SILTSTONE	CARBONACEOUS, BANDS, MODERATELY WEAK ROCK, THINLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
449.50	0.20	100		100% MUDSTONE	CARBONACEOUS, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
449.73	0.23	100		100% SHALE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
450.28	0.55	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
450.87	0.59	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
451.37	0.50	100		100% SILTSTONE	ARENACEOUS, LENSES, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
451.48	0.11	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, LIGHT GREY, STRONG ROCK.
452.04	0.56	100		100% SILTSTONE.	MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
452.14	0.10	100		100% SHALE	DARK GREY, MODERATELY WEAK ROCK.
452.64	0.50	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK, THINLY LAMINATED.
452.71	0.07	100		100% SHALE	DARK GREY, WEAK ROCK.
453.13	0.42	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
453.88	0.75	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
454.12	0.24	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
454.28	0.16	100		100% SANDSTONE	ARGILLACEOUS, MODERATELY STRONG ROCK, THINLY LAMINATED.
455.13	0.85	100		60% SILTSTONE 40% MUDSTONE	DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
456.05	0.92	100		65% SANDSTONE,MEDIUM GRAINED 35% MUDSTONE	DARK GREY. MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES.
456.60	0.55	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
458.36	1.76	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, THICKLY LAMINATED, WITH MUD PELLETS.
458.78	0.42	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
458.89	0.11	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
458.92	0.03	100		100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS.
458.93	0.01	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK, WITH PLANT REMAINS.
458.98	0.05	100		100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS.
459.00	0.02	100		100% MUDSTONE	COALY, STREAKS, LIGHT GREEN, WEAK ROCK, WITH PLANT REMAINS.
459.04	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
459.06	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
459.07	0.01	100		100% MUDSTONE	LIGHT GREEN.
459.10	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
460.50	1.40	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
460.60	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
462.24	1.64	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
462.80	0.56	100		100% SANDSTONE	CALCAREOUS, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH MUD PELLETS, WITH FLAME/PULL STRUCTS.
462.91	0.11	100		100% MUDSTONE	COALY, STREAKS, DARK BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
463.09	0.18	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: POSSIBLY A GRIT TOWARDS THE BASE
463.50	0.41	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
463.94	0.44	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
466.83	2.89	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY STRONG ROCK, THINLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH PLANT REMAINS.
466.93	0.10	100		60% MUDSTONE 40% SANDSTONE	MODERATELY STRONG ROCK.
467.28	0.35	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
					NOTE: LARGE MUDSTONE CLASTS AND QUARTZ FRAGMENTS
468.50	1.22	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
469.60	1.10	100		100% MUDSTONE	DARK GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
469.82	0.22	100		100% MUDSTONE	WITH QUARTZ AND FRAGMENTS OF CALCITE, MODERATELY STRONG ROCK.
470.52	0.70	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
475.00	4.48	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK, THINLY LAMINATED, WITH SAND LINEATION, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
					NOTE: SANDSTONE LENSES
475.07	0.07	100		100% LIMESTONE	SILTSTONE, STRONG ROCK.
477.00	1.93	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
477.18	0.18	100		100% LIMESTONE	SILTSTONE, STRONG ROCK.
479.97	2.79	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK, THINLY LAMINATED.
482.00	2.03	100		100% SILTSTONE	QUARTZITIC, PEBBLY, GREY, STRONG ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: QUARTZ PEBBLES AND LARGE ANGULAR FRAGMENTS ARE ABUNDANT WHILE MINOR MUDSTONE AND CHLORITIC CLASTS ARE ALSO PRESENT
483.06	1.06	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
483.17	0.11	100		100% LIMESTONE	SILTSTONE, STRONG ROCK.
506.45	23.28	100		100% SILTSTONE	ARENACEOUS, GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
					NOTE: SANDSTONE AND MUDSTONE BANDS OCCUR WITH FLAME STRUCTURES ALONG THE SANDSTONE CONTACTS AND SOME REGIONS HIGHLY VIENED BY CALCITE
506.50	0.05	100		100% PEBBLE CONGLOMERATE	BANDS, STRONG ROCK.
506.82	0.32	100		100% SANDSTONE	QUARTZITIC, PEBBLY, LIGHT GREY, STRONG ROCK.
506.85	0.03	100		100% PEBBLE CONGLOMERATE	BANDS, STRONG ROCK.
507.66	0.81	100		100% SANDSTONE	CONGLOMERATIC, BANDS, GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK.
					NOTE: INCREASING GREENISH MINERAL CONTENT
510.50	2.84	100		100% SANDSTONE,COARSE GRAINED	GREEN, WITH FRAGMENTS OF QUARTZ, STRONG ROCK.
					NOTE: MINOR SILTSTONE PEBBLES

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	4.29 M	259.80 - 264.35 M	4.55 M
DC	3.37 M	288.47 - 291.84 M	3.37 M
DC	0.00 M	292.36 - 292.38 M	0.02 M
DDU	1.23 M	346.22 - 347.45 M	1.23 M
DDL	2.79 M	357.06 - 359.85 M	2.79 M
DE2	0.76 M	406.56 - 407.32 M	0.76 M
DF	0.50 M	432.68 - 433.18 M	0.50 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	259.73 - 259.80 M	0.07 M
2	259.80 - 260.44 M	0.64 M
3	260.44 - 261.97 M	1.53 M
4	261.97 - 262.96 M	0.99 M
5	262.96 - 264.09 M	1.13 M
6	288.47 - 289.38 M	0.91 M
7	289.38 - 290.93 M	1.55 M
8	290.93 - 291.84 M	0.91 M
15	345.94 - 346.22 M	0.28 M
16	346.22 - 347.45 M	1.23 M
17	347.45 - 348.11 M	0.66 M
18	348.11 - 348.55 M	0.44 M
9	357.06 - 357.84 M	0.78 M
10	357.84 - 359.85 M	2.01 M
11	359.85 - 359.94 M	0.09 M
12	406.05 - 406.56 M	0.51 M
13	406.56 - 407.32 M	0.76 M
14	432.68 - 433.18 M	0.50 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 3

HOLE TYPE	CORE	
EASTING	600,050 M	GRID
NORTHING	5,380,950 M	GRID
ELEVATION	480.00 M	
TOTAL DEPTH DRILLED	489.54 M	
DRILLING STARTED	30/ 6/78	
DRILLING TIME	27 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
9.00	9.00	70		100% DOLERITE	FERRUGINOUS, STAINING, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
					NOTE: WITH NUMEROUS SLIGHTLY WEATHERED DOLERITE BOULDERS
13.40	4.40	80		100% DOLERITE	MED.-FINE GRAINED, BADLY BROKEN, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK.
15.40	2.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK.
16.00	0.60	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK.
16.80	0.80	100		100% DOLERITE	MEDIUM GRAINED, UNWEATHERED, VERY STRONG ROCK.
17.00	0.20	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, WITH CALCITE ON JOINTS AND TALC ON JOINTS, VERY STRONG ROCK. EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: FRACTURE ZONE
19.80	2.80	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
20.60	0.80	100		100% DOLERITE	BADLY BROKEN, GREY-GREEN, WITH CALCITE ON JOINTS AND TALC ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
					NOTE: FRACTURE ZONE
22.00	1.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
23.60	1.60	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
					NOTE: FRACTURE ZONE
26.00	2.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
27.00	1.00	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CLAY & TALC.
					NOTE: FRACTURE ZONE
28.20	1.20	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
28.60	0.40	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, WITH CALCITE ON JOINTS AND TALC ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
					NOTE: FRACTURE ZONE

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
48.20	19.60	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
54.26	6.06	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
54.50	0.24	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CLAY & TALC. NOTE: FRACTURE ZONE
58.60	4.10	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
59.20	0.60	80		100% DOLERITE	BADLY BROKEN, GREY-GREEN, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CLAY & TALC. NOTE: FRACTURE ZONE
66.50	7.30	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK.
86.00	19.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
134.00	48.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
135.00	1.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
135.50	0.50	100		100% DOLERITE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK. NOTE: CHILLED BASAL CONTACT
137.35	1.85	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, WITH CHLORITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: BAKED APPEARENCE; SHEARED IN PART;
137.76	0.41	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
141.60	3.84	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: WITH SANDSTONE BANDS
144.50	2.90	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
144.75	0.25	100		60% MUDSTONE 20% MUDSTONE 20% MUDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, DARK BROWN. BUFF. WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: BROKEN CORE
145.55	0.80	0		CORE LOSS	NOTE: CORE LOSS
145.68	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
152.03	6.35	100		100% MUDSTONE	SHALY, GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: MINOR FERRUGINOUS STAINING
154.83	2.80	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
155.40	0.57	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
					NOTE: WITH NUMEROUS LARGE CHLORITE PELLETS IN TOP 15 CM.
156.35	0.95	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
158.50	2.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
					NOTE: GRADING INTO VERY COARSE SANDSTONE IN BASAL 25 CM.
158.78	0.28	100		100% CLAYSTONE	BUFF, WEAK ROCK.
160.73	1.95	100		100% MUDSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
					NOTE: MINOR RED AND GREEN STAINING
165.80	5.07	100		90% MUDSTONE 10% MUDSTONE	FERRUGINOUS, STAINING, RED-BROWN. GREY. MODERATELY WEAK ROCK, THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
167.63	1.83	100		100% MUDSTONE	GREY-GREEN, WITH PELLETS OF CHLORITE, WEAK ROCK.
168.88	1.25	100		100% MUDSTONE	GREY, WEAK ROCK.
171.17	2.29	100		50% MUDSTONE 30% CLAYSTONE 20% CARBONACEOUS SHALE	GREY. CARBONACEOUS, STREAKS, LIGHT BROWN. COALY, BANDS. MODERATELY WEAK ROCK, THINLY BEDDED.
171.68	0.51	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
174.10	2.42	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
174.15	0.05	100		100% CLAYSTONE	GREY-GREEN, WEAK ROCK.
175.96	1.81	100		100% MUDSTONE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
177.42	1.46	100		100% MUDSTONE	SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
178.70	1.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
179.18	0.48	100		100% MUDSTONE	COALY, BANDS, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
179.45	0.27	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
179.99	0.54	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
181.85	1.86	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
183.35	1.50	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
185.00	1.65	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
189.75	4.75	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY STRONG ROCK.
189.92	0.17	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
190.12	0.20	100		100% PEBBLE CONGLOMERATE	GREY-BROWN, MODERATELY STRONG ROCK.
190.42	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
194.55	4.13	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS. NOTE: FINE GRADING TO COARSE; CARBONACEOUS BANDS AND LENSES; FRIABLE TOWARDS BASE
198.63	4.08	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,COARSE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY. COALY, LENSES, LIGHT GREY. MODERATELY STRONG ROCK, MEDIUM BEDDED, WITH MUD PELLETS, WITH CROSS LAMINATION.
199.06	0.43	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
199.18	0.12	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
202.80	3.62	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
203.37	0.57	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
205.10	1.73	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
208.64	3.54	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRIABLE, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
209.00	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY STRONG ROCK.
210.30	1.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
213.57	3.27	100		50% MUDSTONE 50% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
214.78	1.21	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
215.11	0.33	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
215.38	0.27	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
216.59	1.21	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
219.26	2.67	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK. NOTE: LAMINATED BELOW 218 M.
219.56	0.30	100		100% CLAYSTONE	MICACEOUS, LIGHT GREEN, WEAK ROCK.
219.81	0.25	100		100% CARBONACEOUS SHALE	
219.86	0.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
219.88	0.02	100		100% CARBONACEOUS SHALE	
219.95	0.07	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
220.01	0.06	100		100% CARBONACEOUS SHALE	
220.05	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
220.08	0.03	100		100% CARBONACEOUS SHALE	
220.30	0.22	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
221.17	0.87	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
222.12	0.95	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
222.19	0.07	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
223.34	1.15	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
229.68	6.34	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION. NOTE: SAND/SILT RATIO INCREASES TOWARDS BASE
231.45	1.77	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS. NOTE: FRIABLE IN PART; OCCASIONAL MUDSTONE BANDS
241.15	9.70	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
241.24	0.09	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
241.29	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
241.55	0.26	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
242.02	0.47	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
242.57	0.55	100		70% CARBONACEOUS SHALE 30% MUDSTONE	CARBONACEOUS, STREAKS, BROWN. WEAK ROCK, VERY THINLY BEDDED.
242.86	0.29	100		100% CLAYSTONE	MICACEOUS, GREY-GREEN, STIFF.
243.07	0.21	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK GREY, MODERATELY WEAK ROCK.
246.47	3.40	100		100% SANDSTONE	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK. NOTE: FINE GRADING TO MEDIUM
246.57	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
246.60	0.03	100		100% CARBONACEOUS SHALE	MUDSTONE, LAMINAE.
246.64	0.04	100		100% CLAYSTONE	BUFF, STIFF.
247.97	1.33	100		100% SILTSTONE	MUDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK.
248.35	0.38	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK. NOTE: WITH 4 CM THICK BAND OF CALCITE VEINLETS AT 248.27 M.
248.40	0.05	100		100% CLAYSTONE	MUDSTONE, BANDS, LIGHT BROWN, WEAK ROCK.
248.61	0.21	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
250.97	2.36	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK. NOTE: WITH BANDS CONTAINING ABUNDANT CALCITE VEINLETS
251.40	0.43	100		100% CLAYSTONE	MICACEOUS, GREY-GREEN, WEAK ROCK. NOTE: WITH MINOR BANDS OF CALCITE VEINLETS
252.02	0.62	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, MODERATELY WEAK ROCK.
253.04	1.02	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
253.70	0.66	100		100% SANDSTONE	VERY FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
254.77	1.07	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
256.23	1.46	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
256.41	0.18	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
256.61	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
257.11	0.50	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
258.19	1.08	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREEN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
259.67	1.48	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
261.95	2.28	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,MEDIUM GRAINED	GREY. MUDSTONE, LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
263.00	1.05	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
265.38	2.38	100		50% MUDSTONE 50% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
265.67	0.29	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
265.82	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
266.30	0.48	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
272.00	5.70	100		100% SANDSTONE,COARSE GRAINED NOTE: FRIABLE IN PART	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : 208.00 M R.L.	
272.16	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, WITH MUD PELLETS.
272.58	0.42	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
272.73	0.15	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
272.75	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
272.76	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
273.20	0.44	100		100% SANDSTONE,COARSE GRAINED NOTE: CALCAREOUS IN BASAL 20 CM.	LIGHT GREY, MODERATELY WEAK ROCK.
273.24	0.04	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
273.25	0.01	100		100% CARBONACEOUS SHALE	
273.33	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
273.78	0.45	100		100% CLAYSTONE	GREY-GREEN, STIFF.
273.86	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
273.91	0.05	100		100% CLAYSTONE	GREY-GREEN, STIFF, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
274.16	0.25	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
274.20	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
274.22	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
274.33	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK. NOTE: GRADING TO HEAVY DULL COAL IN PART
274.57	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
274.67	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
274.75	0.08	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
274.99	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
275.02	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
275.22	0.20	100		100% CLAYSTONE	GREY-GREEN, FIRM.
276.06	0.84	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
276.08	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
276.38	0.30	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
276.41	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, WITH CALCITE ON CLEAT.
276.60	0.19	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
276.67	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
276.76	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
276.77	0.01	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
276.78	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
276.80	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
276.89	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
276.91	0.02	100		100% COAL, BRIGHT	
276.94	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
276.99	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
277.22	0.23	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
277.26	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
277.27	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
277.30	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
277.35	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
277.36	0.01	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
277.38		100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
277.46		100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
277.48	0.02	100		100% COAL, BRIGHT	
			BASE OF DALMAYNE B : THICKNESS= 5.48 M; SAMPLED THICKNESS= 0.00 M		
277.53	0.05	100		100% MUDSTONE	BRIGHT COAL, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
278.12	0.59	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, WEAK ROCK.
278.93	0.81	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, BEDS DIP 6 DEG.
				NOTE: BECOMING SILTY TOWARDS BASE	
279.57	0.64	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, BEDS DIP 6 DEG.
280.60	1.03	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, WITH SLUMP STRUCTURES.
287.75	7.15	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
287.76	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
287.82	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
287.84	0.02	100		100% CARBONACEOUS SHALE	
287.90	0.06	100		100% CLAYSTONE	WEAK ROCK.
287.93	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
287.97	0.04	100		100% CLAYSTONE	GREY, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
288.21	0.24	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
290.96	2.75	100		50% MUDSTONE 50% MUDSTONE	GREY. DARK GREY. MODERATELY WEAK ROCK, BEDS DIP 7 DEG., WITH LOAD CASTS.
301.34	10.38	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
				NOTE: CALCEROUS FROM 298.16-298.97 M; FRIABLE IN PART; BANDS OF MUDSTONE PEBBLES IN BASAL 1.0 M.	
301.64	0.30	100		100% SANDSTONE,FINE GRAINED	SCREE, LENSES, GREY, MODERATELY WEAK ROCK.
302.15	0.51	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
302.81	0.66	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, BEDS DIP 7 DEG.
303.01	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
303.11	0.10	100		100% CLAYSTONE	CARBONACEOUS, BANDS, BUFF, WEAK ROCK.
303.25	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
303.30	0.05	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
303.33	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
303.40	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
303.58	0.18	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
303.64	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
303.66	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
303.68	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
303.69	0.01	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
304.14	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
				TOP OF DALMAYNE C : 175.86 M R.L.	
304.33	0.19	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS. NOTE: FRACTURED; GRADING TO DULL COAL AND CARB MUDSTONE IN PART
304.35	0.02	100		100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN-BLACK, MODERATELY WEAK ROCK.
304.51	0.16	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
304.52	0.01	100		100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN-BLACK, MODERATELY WEAK ROCK.
304.55	0.03	100		100% COAL, HEAVY DULL	
304.64	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
304.65	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
304.70	0.05	100		100% COAL, DULL	
304.86	0.16	100		100% COAL, HEAVY DULL	MODERATELY STRONG ROCK.
				BASE OF DALMAYNE C : THICKNESS= 0.72 M; SAMPLED THICKNESS= 0.00 M	
305.04	0.18	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
305.13	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
305.17	0.04	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
305.24	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
305.34	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
305.49	0.15	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
305.65	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
305.69	0.04	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
305.80	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
305.83	0.03	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
305.94	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
305.97	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
305.98	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
306.15	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
308.88	2.73	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. MODERATELY WEAK ROCK, MEDIUM BEDDED.
312.07	3.19	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE	MUDSTONE, LAMINAE, GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
312.45	0.38	100		60% MUDSTONE 40% MUDSTONE	GREY. DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
318.01	5.56	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION. NOTE: FRIABLE IN PART; ABUNDANT MUDSTONE PEBBLES AND CARBONACEOUS LENSES IN BASAL 40 CM.
318.12	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
318.42	0.30	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
318.48	0.06	100		100% CLAYSTONE	LIGHT BROWN, STIFF.
318.83	0.35	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
319.26	0.43	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: NUMEROUS MUDSTONE PEBBLES IN TOP 16 CM.
320.15	0.89	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: FRIABLE IN PART
321.65	1.50	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
322.49	0.84	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
322.85	0.36	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: NUMEROUS COAL LENSES AND MUDSTONE PEBBLES
323.05	0.20	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
323.97	0.92	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: NUMEROUS COAL LENSES AND MUDSTONE PEBBLES
331.84	7.87	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: GRADING TO VERY COARSE IN PART WITH MUDSTONE PEBBLES AND COAL LENSES
332.12	0.28	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
354.60	22.48	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: GRADING TO VERY COARSE IN PART; MUDSTONE PEBBLES FROM 333.15-333.90M AND 350.00-350.15M; CALCAREOUS FROM 337.10-337.60M CARBONACEOUS LENSES FROM 340.10-340.45M; FRIABLE IN PART BELOW 346.60M.
355.06	0.46	100		100% MUDSTONE	SCREE, LENSES, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
360.97	5.91	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
					NOTE: GRADING TO VERY COARSE IN PART; CALCAREOUS FROM 357.00-357.80 M.
				TOP OF DALMAYNE D UPPER : 119.03 M R.L.	
361.06	0.09	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
361.43	0.37	100	1	100% COAL, HEAVY DULL	DULL COAL, BANDS.
361.48	0.05	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
361.64	0.16	100	1	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
361.67	0.03	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
361.70	0.03	100	1	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
361.81	0.11	100	1	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
361.84	0.03	100	1	100% COAL, HEAVY DULL	MUDSTONE, LAMINAE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
361.87	0.03	100	1	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
361.92	0.05	100	1	100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
361.94	0.02	100	1	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
361.96	0.02	100	1	100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
362.04	0.08	100	2	100% COAL, DULL	
362.64	0.60	100	2	100% COAL, DULL	NOTE: FRACTURED IN PART
363.68	1.04	100	2	100% COAL, DULL	
363.70	0.02	100	2	100% CARBONACEOUS SHALE	
363.82	0.12	100	2	100% COAL, DULL	
				BASE OF DALMAYNE D UPPER : THICKNESS= 2.85 M; SAMPLED THICKNESS= 2.85 M	
363.83	0.01	100		100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
363.90	0.07	100		100% MUDSTONE	BRIGHT COAL, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
363.97	0.07	100		100% MUDSTONE	COALY, LENSES, GREY, WEAK ROCK, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
364.00	0.03	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, FIRM.
365.46	1.46	100		100% MUDSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
365.61	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
365.77	0.16	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
365.86	0.09	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,COARSE GRAINED	LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
					NOTE: GRADATIONAL BASAL CONTACT
366.55	0.69	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
366.70	0.15	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
					NOTE: GRADATIONAL BASAL CONTACT
376.68	9.98	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: POORLY DEVELOPED FINE BEDDING FROM 370.35-373.10M; CALCAREOUS FROM 371.20-372.15M; NUMEROUS COAL LENSES AND MUDSTONE FRAGMENTS FROM 373.10-375.45M.
				TOP OF DALMAYNE D LOWER : 103.32 M R.L.	
377.00	0.32	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
377.10	0.10	100	3	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
377.16	0.06	100	3	100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
377.23	0.07	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
377.30	0.07	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK. NOTE: 0.5 CM LIGHT BROWN MUDSTONE BAND AT BASE
377.44	0.14	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
377.45	0.01	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK. NOTE: GRADATIONAL BASAL CONTACT
377.47	0.02	100	4	100% MUDSTONE	BRIGHT COAL, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
377.48	0.01	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, WITH MUD PELLETS.
377.98	0.50	100	4	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
377.99	0.01	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
378.45	0.46	100	4	100% COAL, HEAVY DULL	MUDSTONE, BANDS. NOTE: GRADING TO DULL COAL IN PART
378.75	0.30	100	4	100% COAL, HEAVY DULL	DULL COAL, BANDS, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
378.80	0.05	100	4	100% COAL, HEAVY DULL	MUDSTONE, BANDS.
378.86	0.06	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
379.20	0.34	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
379.22	0.02	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN, FIRM.
379.50	0.28	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
				BASE OF DALMAYNE D LOWER : THICKNESS= 2.82 M; SAMPLED THICKNESS= 2.82 M	
379.78	0.28	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
379.81	0.03	100		100% CLAYSTONE	LIGHT BROWN, FIRM, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
379.83	0.02	100		100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
381.02	1.19	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
381.05	0.03	100		100% MUDSTONE	COALY, LENSES, DARK GREY, WEAK ROCK, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
381.07	0.02	100		100% COAL, BRIGHT	
381.15	0.08	100		100% MUDSTONE	COALY, LENSES, DARK GREY, WEAK ROCK, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
381.21	0.06	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
381.77	0.56	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
382.32	0.55	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. GREY. WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
384.62	2.30	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
384.63	0.01	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
384.80	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
384.84	0.04	100		100% CLAYSTONE	LIGHT GREY, STIFF.
385.16	0.32	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
385.19	0.03	100		100% CLAYSTONE	BROWN, FIRM.
385.28	0.09	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
385.29	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
385.32	0.03	100		100% COAL, HEAVY DULL	
385.41	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
385.42	0.01	100		100% CARBONACEOUS SHALE	
386.12	0.70	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
386.23	0.11	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
386.33	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
387.75	1.42	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
387.84	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
387.88	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
387.91	0.03	100		100% CARBONACEOUS SHALE	
387.94	0.03	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
388.00	0.06	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
388.10	0.10	100		100% COAL, HEAVY DULL	
388.17	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
388.40	0.23	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
395.57	7.17	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
395.66	0.09	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
398.13	2.47	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
399.82	1.69	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
400.16	0.34	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
406.68	6.52	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
409.72	3.04	100		90% MUDSTONE 10% MUDSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
410.10	0.38	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
411.31	1.21	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
411.49	0.18	100		100% CLAYSTONE	GREY, FIRM, WITH PLANT REMAINS.
411.57	0.08	0		CORE LOSS	NOTE: CORE LOSS
412.23	0.66	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, THINLY LAMINATED.
412.40	0.17	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
412.76	0.36	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
413.49	0.73	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
413.96	0.47	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, THINLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
415.70	1.74	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION. NOTE: SAND/MUD RATIO INCREASES TOWARDS BASE.
416.28	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
417.69	1.41	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
418.47	0.78	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BLACK. CARBONACEOUS, STREAKS, GREY-BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
419.07	0.60	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
419.75	0.68	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
421.01	1.26	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
421.58	0.57	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BLACK. CARBONACEOUS, STREAKS, GREY-BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
423.63	2.05	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
423.68	0.05	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, THINLY LAMINATED, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
423.71	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, SOFT.
			TOP OF DALMAYNE E2 : 56.29 M R.L.		
424.15	0.44	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
			BASE OF DALMAYNE E2 : THICKNESS= 0.44 M; SAMPLED THICKNESS= 0.00 M		
430.69	6.54	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, BANDS, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
432.90	2.21	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, STREAKS, GREY. LIGHT GREY. MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
433.03	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
433.13	0.10	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY THINLY BEDDED, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
434.67	1.54	100		70% SANDSTONE 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, GREY-BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION. NOTE: SAND/MUD RATIO INCREASES TOWARDS BASE; SANDSTONE GRADES FRO M FINE TO MEDIUM GRAINED
437.32	2.65	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH PLANT REMAINS. NOTE: VERY FINE GRADING TO MEDIUM GRAINED
437.53	0.21	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, THINLY LAMINATED.
437.73	0.20	100		80% CARBONACEOUS SHALE 20% CLAYSTONE	BRIGHT COAL, LENSES. CARBONACEOUS, STREAKS, LIGHT BROWN. FIRM.
439.36	1.63	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
439.77	0.41	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
439.80	0.03	100	5	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
439.89	0.09	100	5	100% CARBONACEOUS MUDSTONE	
439.93	0.04	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
439.96	0.03	100	5	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
440.00	0.04	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
440.19	0.19	100	5	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
440.26	0.07	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
440.28	0.02	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
440.32	0.04	100	5	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
		TOP OF	DALMAYNE F : 39.68 M R.L.		
440.70	0.38	100	6	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
440.71	0.01	100	6	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
441.03	0.32	100	6	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS, WITH CALCITE AND PYRITE.
		BASE OF	DALMAYNE F : THICKNESS= 0.71 M; SAMPLED THICKNESS= 0.71 M		
443.46	2.43	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH MUD PELLETS.
450.41	6.95	100		50% SANDSTONE 50% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK.
461.70	11.29	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS. NOTE: CARBONACEOUS MUDSTONE LENSES CONTAINING CALCITE ARAGMENTS FROM 459.27-459.29;COAL STREAKS; POORLY DEVELOPED PINE BEDDING IN PART
462.30	0.60	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH MUD PELLETS.
463.94	1.64	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS. NOTE: CARBONACEOUS LENSES WITH CALCITE FRAGMENTS AT 463.23M LAST 14 CMS CONTAINS MUDSTONE AND SANDSTONE FRAGMENTS
464.57	0.63	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES. NOTE: GRADATIONAL CONTACT AT BASE
466.14	1.57	100		50% MUDSTONE 50% SILTSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
467.19	1.05	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
467.88	0.69	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	CARBONACEOUS, BANDS, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
469.65	1.77	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS. NOTE: MEDIUM-FINE GRADING TO VERY COARSE WITH DEPTH. LAST 10 CMS -GRIT WITH MUDSTONE FRAGMENTS;SILTSTONE BANDS FROM 468.61-469.15M
469.95	0.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
471.01	1.06	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	CARBONACEOUS, BANDS, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
471.47	0.46	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
472.18	0.71	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
472.85	0.67	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK. NOTE: VERY FINE SANDSTONE BANDS AT TOP
473.09	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
473.15	0.06	100		100% MUDSTONE	BUFF, STIFF.
473.18	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
473.24	0.06	100		100% MUDSTONE	BUFF, FIRM.
473.26	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
473.29	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BUFF, WEAK ROCK.
473.31	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
473.36	0.05	100		100% COAL, DULL	
473.39	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
473.44	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK. NOTE: JOINT AT BASE CONTAINING CALCITE
473.48	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
473.66	0.18	100		100% MUDSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
473.98	0.32	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
474.47	0.49	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
474.77	0.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK. NOTE: SILTY IN PART
474.94	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
475.02	0.08	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
475.52	0.50	100		100% SILTSTONE	ARGILLACEOUS, GREY, MODERATELY WEAK ROCK.
475.85	0.33	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
476.09	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MODERATELY WEAK ROCK. NOTE: SILTSTONE BANDS
476.24	0.15	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
476.55	0.31	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
477.17	0.62	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
477.98	0.81	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
					NOTE: GRADING FROM FINE TO VERY COARSE AT BASE-GRIT:SILTSTONE BANDS AT TOP OF UNIT;MUDSTONE AND QUARTZ FRAGMENTS IN BASAL GRIT
479.31	1.33	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: SANDY BANDS AT TOP OF UNIT,SILTY AT BASE
479.40	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
479.77	0.37	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY.
					NOTE: SANDSTONE AND CARBONACEOUS BANDS IN BASAL 10CMS
482.59	2.82	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	COARSE GRAINED, BANDS, GREY. DARK GREY. MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
					NOTE: COARSE SANDSTONE CONTAINS MUDSTONE,QUARTZ AND FELDSPAR FRAGMENTS PLUS COAL STREAKS MEDIUM TO FINE SANDSTONE CONTAINS CARBONACEOUS STREAKS
484.41	1.82	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: FINE SANDSTONE BANDS;CARBONACEOUS FRAGMENTS;COAL STREAKS AND QUARTZ FRAGMENTS PRESENT
484.73	0.32	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: SANDSTONE FINER GRAINED AT TOP OF UNIT; SANDSTONE AND MUDSTONE FRAGMENTS AND SANDSTONE PEBBLES AT BASAL CONTACT -BASE OF TRIASSIC
486.23	1.50	100		100% SILTSTONE	DARK GREY, WITH CALCITE ON JOINTS AND FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: COLOUR BECOMING LIGHTER WITH DEPTH DUE TO AN INCREASE IN QUARTZ FRAGMENTS
486.81	0.58	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
					NOTE: GRADING TO CONGLOMERATE WITH DEPTH WITH AN INCREASE IN QUARTZ AND ROCK FRAGMENTS
486.99	0.18	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY STRONG ROCK.
					NOTE: MUDSTONE FRAGMENTS
487.19	0.20	100		100% SILTSTONE	DARK GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	272.00 - 277.48 M	5.48 M
DC	0.00 M	304.14 - 304.86 M	0.72 M
DDU	2.85 M	360.97 - 363.82 M	2.85 M
DDL	2.82 M	376.68 - 379.50 M	2.82 M
DE2	0.00 M	423.71 - 424.15 M	0.44 M
DF	0.71 M	440.32 - 441.03 M	0.71 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	360.97 - 361.96 M	0.99 M
2	361.96 - 363.82 M	1.86 M
3	376.68 - 377.30 M	0.62 M
4	377.30 - 379.50 M	2.20 M
5	439.77 - 440.32 M	0.55 M
6	440.32 - 441.03 M	0.71 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 4

HOLE TYPE	CORE	
EASTING	598,150 M	GRID
NORTHING	5,383,000 M	GRID
ELEVATION	530.00 M	
TOTAL DEPTH DRILLED	453.44 M	
DRILLING STARTED	1/ 8/78	
DRILLING TIME	18 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
10.21	10.21	10		60% DOLERITE 40% DOLERITE	FRIABLE, MEDIUM GRAINED, GREY. FERRUGINOUS, ORANGE-YELLOW. HIGHLY WEATHERED, VERY WEAK ROCK. NOTE: MN OXIDE STAINING
11.00	0.79	90		100% CLAY	FERRUGINOUS, ORANGE-YELLOW, COMPLETELY WEATHERED, SOFT. NOTE: MN OXIDE STAINING
18.60	7.60	60		60% DOLERITE 40% DOLERITE	FERRUGINOUS, ORANGE-YELLOW. FRIABLE, MEDIUM GRAINED, GREY. HIGHLY WEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC. NOTE: MN OXIDE STAINING
25.50	6.90	60		90% DOLERITE 10% DOLERITE	FERRUGINOUS, ORANGE-YELLOW. FRIABLE, MEDIUM GRAINED, GREY. HIGHLY WEATHERED, VERY WEAK ROCK. NOTE: MN OXIDE STAINING
27.50	2.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS
29.00	1.50	90		100% DOLERITE	FERRUGINOUS, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN OXIDE STAINING
37.00	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS; DIP OF JOINTS RANGES FROM 30 TO 30 DEG.
37.20	0.20	100		100% DOLERITE	FERRUGINOUS, ORANGE-YELLOW, HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN OXIDE STAINING
39.30	2.10	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS
39.40	0.10	70		100% DOLERITE	FERRUGINOUS, BADLY BROKEN, ORANGE-YELLOW, HIGHLY WEATHERED, WEAK ROCK. NOTE: MN OXIDE STAINING
42.70	3.30	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS
44.80	2.10	70		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK. NOTE: MN AND FE OXIDE STAINING ON JOINTS

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
45.40	0.60	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS
46.80	1.40	70		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK. NOTE: MN AND FE OXIDE STAINING ON JOINTS
47.45	0.65	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MN AND FE OXIDE STAINING ON JOINTS
60.50	13.05	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, . NOTE: DIP OF JOINTS 10-30 DEG. AND 60-80 DEG.; NUMEROUS FINE FRACTURES IN PART
67.50	7.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: NUMEROUS FINE FRACTURES IN PART
72.60	5.10	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
75.00	2.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: NUMEROUS FINE FRACTURES IN PART
75.90	0.90	100		100% DOLERITE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
76.65	0.75	100		100% DOLERITE	FINE GRAINED, CHLORITIC, GREY-GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
76.75	0.10	100		100% DOLERITE	VERY FINE GRAINED, CHLORITIC, DARK GREEN, MODERATELY WEAK ROCK.
77.02	0.27	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK. NOTE: IRREGULAR BASAL CONTACT; MOTTLED IN PART
80.00	2.98	100		100% MUDSTONE	CLAYSTONE, BANDS, GREY-GREEN, MODERATELY WEAK ROCK. NOTE: BAKED APPEARENCE
81.00	1.00	90		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK. NOTE: MOTTLED APPEARENCE CAUSED BY DARK GREEN AND PURPLE-RED STAINING
82.00	1.00	70		100% MUDSTONE	FERRUGINOUS, STAINING, GREY-BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
84.50	2.50	70		100% MUDSTONE	FERRUGINOUS, STAINING, DARK GREY, MODERATELY WEAK ROCK. NOTE: WITH NUMEROUS IRREGULAR "LENSES" OF CREAM CLAYSTONE
84.85	0.35	100		100% CLAYSTONE	FERRUGINOUS, STAINING, CREAM, WEAK ROCK.
85.35	0.50	100		100% MUDSTONE	FERRUGINOUS, STAINING, BLUE-GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
85.55	0.20	100		100% MUDSTONE	FERRUGINOUS, STAINING, GREY, WITH ABUNDANT MICA, STIFF.
91.50	5.95	100		100% MUDSTONE	FERRUGINOUS, STAINING, GREY, WEAK ROCK. NOTE: SHALY IN PART,MOTTLED IN PART, MINOR SOFT CLAY BANDS
97.85	6.35	100		40% MUDSTONE 40% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BANDS, GREY. GREY-BROWN. GREY-GREEN. WEAK ROCK, MEDIUM BEDDED. NOTE: MINOR IRON STAINING; MOTTLED IN PART
97.95	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
98.00	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
98.10	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
98.22	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
99.53	1.31	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
99.88	0.35	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
101.13	1.25	100		100% CLAYSTONE	LIGHT GREY, WEAK ROCK, WITH CARBONACEOUS WISPS.
101.50	0.37	100		100% CLAYSTONE	GREY-GREEN, WEAK ROCK.
101.56	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
102.00	0.44	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
104.80	2.80	100		100% MUDSTONE	FERRUGINOUS, STAINING, GREY, WEAK ROCK.
105.15	0.35	100		100% MUDSTONE	FERRUGINOUS, RED-BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
105.75	0.60	100		100% MUDSTONE	FERRUGINOUS, STAINING, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
105.85	0.10	100		100% MUDSTONE	FERRUGINOUS, STAINING, DARK GREY, WEAK ROCK.
109.15	3.30	100		100% MUDSTONE	FERRUGINOUS, RED-BROWN, WEAK ROCK. NOTE: OCCASIONAL UNSTAINED GREY SECTIONS

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
110.80	1.65	100		70% MUDSTONE 20% MUDSTONE 10% CLAYSTONE	GREY. LIGHT GREEN. LIGHT GREY. WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: MINOR IRON STAINING; IRREGULAR GREEN (CHLORITE?) FRAGMENTS
111.81	1.01	100		100% MUDSTONE	GREY-GREEN, WEAK ROCK.
112.16	0.35	100		100% MUDSTONE	GREY, WEAK ROCK.
112.61	0.45	100		100% CLAYSTONE	GREY-BROWN, WEAK ROCK.
115.17	2.56	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, WEAK ROCK. NOTE: THIN BANDS OF SOFT LIGHT BROWN CLAYSTONE
115.23	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
115.79	0.56	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
115.89	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
117.80	1.91	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK. NOTE: IRREGULAR CLAYSTONE AND CARB MUDSTONE BANDS AND LENSES
123.32	5.52	100		40% CLAYSTONE 30% MUDSTONE 30% MUDSTONE	CALCITIC, FRAGMENTS, LIGHT BROWN. CARBONACEOUS, GREY-BROWN. COALY, BLACK. THINLY BEDDED, WITH FLAME/PULL STRUCTS, WITH LOAD CASTS. NOTE: STRENGTH RANGES FROM WEAK TO MOD STRONG
123.45	0.13	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
125.09	1.64	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
125.78	0.69	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
128.46	2.68	100		100% SANDSTONE,COARSE GRAINED	MEDIUM GRAINED, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
129.06	0.60	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY STRONG ROCK.
129.27	0.21	100		100% SANDSTONE,COARSE GRAINED	SILTSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
131.62	2.35	50		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK. NOTE: FRIABLE IN PART; COARSE SAND MATRIX; PEBBLES MAINLY ROCK FRAGMENTS
132.51	0.89	100		100% SANDSTONE,COARSE GRAINED	CREAM, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS. NOTE: GRADES TO PALE BROWN IN PART
132.83	0.32	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
133.35	0.52	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, CREAM, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
135.98	2.63	100		100% SANDSTONE,COARSE GRAINED	CREAM, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
					NOTE: GRADES TO PALE BROWN IN BASAL 20 CM.
136.64	0.66	100		100% SANDSTONE,COARSE GRAINED	BROWN, MODERATELY WEAK ROCK.
136.88	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS.
138.98	2.10	100		100% SANDSTONE,COARSE GRAINED	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
141.71	2.73	100		100% SANDSTONE,MEDIUM GRAINED	COARSE GRAINED, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
142.99	1.28	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
143.95	0.96	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
148.37	4.42	100		100% SANDSTONE,COARSE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
148.97	0.60	100		100% SANDSTONE,COARSE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
149.11	0.14	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
149.20	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
150.01	0.81	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
150.04	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
150.12	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
150.15	0.03	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, FIRM.
150.25	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
150.60	0.35	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
150.64	0.04	100		100% CLAYSTONE	CREAM, SOFT.
150.67	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
150.70	0.03	100		100% CLAYSTONE	CREAM, SOFT.
150.97	0.27	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
151.78	0.81	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
152.42	0.64	100		100% CLAYSTONE	CREAM, VERY WEAK ROCK.
152.44	0.02	100		100% CLAYSTONE	GREY, WEAK ROCK.
152.49	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
152.59	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
152.69	0.10	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
152.75	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
152.82	0.07	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
152.86	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
152.91	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
153.01	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
153.04	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
153.07	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
153.12	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
153.15	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
153.17	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
153.19	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
153.23	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
153.27	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
153.31	0.04	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
153.98	0.67	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
154.01	0.03	100		100% MUDSTONE	ARENACEOUS, CREAM, MODERATELY WEAK ROCK.
154.06	0.05	100		100% COAL, HEAVY DULL	
154.14	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
154.16	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
154.17	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
154.20	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
154.24	0.04	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
154.36	0.12	100		100% MUDSTONE	SANDSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
154.42	0.06	100		100% CLAYSTONE	CALCITIC, LENSES, CREAM, SOFT.
154.49	0.07	100		100% MUDSTONE	SANDSTONE, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
154.52	0.03	100		100% MUDSTONE	BROWN-BLACK, MODERATELY STRONG ROCK.
154.55	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
154.66	0.11	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
154.95	0.29	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
154.96	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
155.14	0.18	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, STREAKS, LIGHT BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
155.40	0.26	100		100% MUDSTONE	MICACEOUS, CREAM, WEAK ROCK.
157.30	1.90	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BRIGHT COAL, STREAKS, LIGHT BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
157.80	0.50	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
158.00	0.20	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
160.16	2.16	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
161.10	0.94	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
161.32	0.22	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, MODERATELY WEAK ROCK.
161.46	0.14	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
161.76	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
161.98	0.22	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
162.40	0.42	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
163.08	0.68	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
163.22	0.14	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
163.32	0.10	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
163.62	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
169.61	5.99	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
169.87	0.26	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
179.83	9.96	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART; BANDS WITH MUDSTONE LENSES AND COAL LENSES
179.97	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
180.07	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
180.72	0.65	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, VERY WEAK ROCK.
181.81	1.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
182.04	0.23	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
183.44	1.40	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
186.11	2.67	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
186.16	0.05	100		100% CLAYSTONE	CREAM, STIFF.
186.18	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
186.39	0.21	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
187.29	0.90	100		100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY WEAK ROCK.
188.41	1.12	100		100% SANDSTONE,FINE GRAINED	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
188.78	0.37	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: GRADATIONAL LOWER BOUNDARY
189.57	0.79	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK. NOTE: GRADATIONAL LOWER BOUNDARY
190.32	0.75	100		100% MUDSTONE	GREY, WITH GRANULAR CALCITE, MODERATELY WEAK ROCK.
191.06	0.74	100		100% CLAYSTONE	LIGHT GREY, WITH LAMINAE OF CALCITE, WEAK ROCK.
191.07	0.01	100		100% SANDSTONE,MEDIUM GRAINED	MICACEOUS, CREAM, MODERATELY WEAK ROCK.
193.00	1.93	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
193.24	0.24	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK.
194.33	1.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
194.56	0.23	100		100% CLAYSTONE	CREAM, FIRM.
194.68	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
194.84	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
194.88	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
195.21	0.33	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
195.34	0.13	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
195.52	0.18	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
195.76	0.24	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
196.36	0.60	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
196.47	0.11	100		100% SANDSTONE,FINE GRAINED	FRIABLE, GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
196.81	0.34	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
197.45	0.64	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
198.00	0.55	100		100% CLAYSTONE	CREAM, FIRM, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
198.29	0.29	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
201.32	3.03	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
					NOTE: CLOSELY FRACTURED BETWEEN 199.15-199.35 M.
202.45	1.13	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS, WITH CROSS LAMINATION.
204.58	2.13	100		45% SANDSTONE,FINE GRAINED 45% SANDSTONE,MEDIUM GRAINED 10% CLAYSTONE	GREY. CARBONACEOUS, FINE GRAINED SANDSTONE, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS, WITH CROSS LAMINATION.
205.16	0.58	100		45% SANDSTONE,FINE GRAINED 45% CLAYSTONE 10% MUDSTONE	GREY. GREY. DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS, WITH CROSS LAMINATION.
212.06	6.90	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART, COALY LENSES AND MUDSTONE PEBBLES IN PART, 7 CM CARB MUDSTONE BAND AT 211.50 M.
215.05	2.99	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: FRIABLE IN PART,MUDSTONE PEBBLES AND CARB LAMINAE
				TOP OF DALMAYNE B : 314.95 M R.L.	
215.06	0.01	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
215.31	0.25	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
215.34	0.03	100	1	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
215.40	0.06	100	1	100% CLAYSTONE	FISSILE, CREAM, SOFT.
215.42	0.02	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
215.52	0.10	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
215.62	0.10	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
215.68	0.06	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
216.17	0.49	100	1	100% COAL, HEAVY DULL	NOTE: GRADING TO CARB MUDSTONE IN PART
216.20	0.03	100	2	100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
216.23	0.03	100	2	100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY-GREEN, WEAK ROCK.
216.31	0.08	100	2	100% CLAYSTONE	FISSILE, CREAM, SOFT.
216.53	0.22	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
216.62	0.09	100	2	100% CARBONACEOUS MUDSTONE	
216.65	0.03	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
216.75	0.10	100	2	100% CLAYSTONE	FISSILE, LIGHT BROWN, SOFT.
216.76	0.01	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
216.95	0.19	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
216.99	0.04	100	3	100% COAL, HEAVY DULL	
217.02	0.03	100	3	100% MUDSTONE	ARENACEOUS, FISSILE, BROWN, SOFT.
217.04	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
217.37	0.33	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
217.51	0.14	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
217.54	0.03	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
217.61	0.07	100	4	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
217.88	0.27	100	4	100% CLAYSTONE	FISSILE, LIGHT GREY, SOFT.
217.99	0.11	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
218.12	0.13	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
218.22	0.10	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
218.39	0.17	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
218.42	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.47	0.05	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
218.53	0.06	100	5	100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
218.54	0.01	100	5	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
218.70	0.16	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
218.74	0.04	100	5	100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
218.80	0.06	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
218.89	0.09	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
218.94	0.05	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
218.98	0.04	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
219.02	0.04	100	5	100% MUDSTONE	CARBONACEOUS, DARK BROWN.
219.18	0.16	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
219.23	0.05	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
219.25	0.02	100	5	100% COAL, BRIGHT	
219.34	0.09	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALHAYNE B : THICKNESS= 4.29 M; SAMPLED THICKNESS= 4.29 M	
219.38	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
219.39	0.01	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
219.43	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
219.59	0.16	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
220.62	1.03	100		70% SILTSTONE 30% MUDSTONE	CARBONACEOUS, LENSES, LIGHT GREY. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS, WITH SLUMP STRUCTURES.
220.84	0.22	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
220.95	0.11	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
220.97	0.02	100		50% COAL, BRIGHT 50% CARBONACEOUS SHALE	THINLY LAMINATED.
221.09	0.12	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: ABUNDANT COAL AND MUDSTONE LENSES
221.23	0.14	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
221.43	0.20	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: ABUNDANT COAL AND MUDSTONE LENSES
238.68	17.25	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: GRADING TO MEDIUM IN PART, FRIABLE IN PART, MUDSTONE PEBBLES AND COAL LENSES IN PART
238.79	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
238.81	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
238.86	0.05	100		100% CLAYSTONE	BUFF, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: WITH GREEN MUD PELLETS
238.87	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
238.90	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
241.60	2.70	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
243.05	1.45	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	GREY. CARBONACEOUS, LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
					NOTE: COAL LENSES AND MUDSTONE PEBBLES IN PART
243.15	0.10	0		CORE LOSS	NOTE: CORE LOSS
				TOP OF DALMAYNE C : 286.85 M R.L.	
243.21	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
243.23	0.02	100		100% CLAYSTONE	CREAM, SOFT.
243.26	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
243.30	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.32	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
243.37	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.39	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
243.41	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
243.42	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
243.44	0.02	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, FIRM.
243.47	0.03	100		100% CLAYSTONE	CARBONACEOUS, BROWN-BLACK, FIRM.
243.56	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.65	0.09	100		70% MUDSTONE 30% MUDSTONE	GREY-BROWN. CARBONACEOUS, BROWN-BLACK. WEAK ROCK, THICKLY LAMINATED.
243.69	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.89	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
243.97	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
244.02	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
244.19	0.17	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
244.37	0.18	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
244.40	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
244.49	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
244.52	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
244.55	0.03	100		100% CLAYSTONE	LIGHT BROWN, STIFF.
244.56	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
244.62	0.06	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, WEAK ROCK.
244.72	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
244.74	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
244.75	0.01	100		100% COAL, BRIGHT	
244.80	0.05	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
244.88	0.08	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, FIRM.
244.89	0.01	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
245.00	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
245.14	0.14	100		100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, WEAK ROCK.
245.41	0.27	100		100% MUDSTONE	BROWN-BLACK, MODERATELY WEAK ROCK, WITH MUD PELLETS.
245.43	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
245.59	0.16	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, LAMINAE, BROWN-BLACK, MODERATELY STRONG ROCK.
245.64	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
245.72	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
245.80	0.08	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES.
245.86	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES.
246.05	0.19	100		100% COAL, HEAVY DULL	
246.08	0.03	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
246.14	0.06	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
246.51	0.37	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
				NOTE: GRADING TO HEAVY DULL COAL IN PART	
246.54	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
246.60	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
246.67	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
246.68	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
246.86	0.18	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
246.95	0.09	100		100% CARBONACEOUS MUDSTONE	MODERATELY STRONG ROCK.
247.00	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
247.03	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
247.12	0.09	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
247.16	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
247.34	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
247.51	0.17	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
247.55	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
247.77	0.22	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, WEAK ROCK.
			BASE OF DALMAYNE C : THICKNESS= 4.62 M; SAMPLED THICKNESS= 0.00 M		
248.00	0.23	100		100% MUDSTONE	GREY, WEAK ROCK.
248.49	0.49	100		100% MUDSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
249.19	0.70	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
249.30	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
249.99	0.69	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
251.11	1.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: FRIABLE IN PART
262.80	11.69	80		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: FRIABLE IN PART, CLOSELY JOINTED AND FRACTURED IN PART
265.55	2.75	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART, FRACTURED MUDSTONE PEBBLES
282.09	16.54	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, . NOTE: CALCAREOUS IN PART,
285.23	3.14	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: FRIABLE IN PART, NUMEROUS CARB LENSES AND MUDSTONE PEBBLES
287.81	2.58	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART
289.13	1.32	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: MEDIUM GRADING TO COARSE; MUDSTONE LENSES IN PART
290.05	0.92	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
297.29	7.24	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
297.57	0.28	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
298.61	1.04	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
298.84	0.23	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, BEDS DIP 45 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
299.09	0.25	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: MUDSTONE PEBBLES AND CARB LENSES
299.25	0.16	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
299.33	0.08	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK.
299.80	0.47	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: MUDSTONE PEBBLES AND CARB LENSES
301.85	2.05	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
301.88	0.03	100	6	100% CARBONACEOUS MUDSTONE	MODERATELY STRONG ROCK.
301.93	0.05	100	6	100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
301.96	0.03	100	6	100% CLAYSTONE	BUFF, FIRM, THINLY LAMINATED.
302.15	0.19	100	6	100% CARBONACEOUS MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, MODERATELY STRONG ROCK.
				TOP OF DALMAYNE D UPPER : 227.85 M R.L.	
303.57	1.42	100	7	100% COAL, DULL	MUDSTONE, LAMINAE, WITH CALCITE AND PYRITE. NOTE: GRADING TO CARB. MUDSTONE IN PART
303.60	0.03	100	7	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
303.92	0.32	100	7	100% COAL, HEAVY DULL	MUDSTONE, LAMINAE. NOTE: GRADING TO DULL COAL IN PART
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.77 M; SAMPLED THICKNESS= 1.77 M	
304.00	0.08	100		100% MUDSTONE	BRIGHT COAL, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
304.20	0.20	100		100% MUDSTONE	COALY, LENSES, GREY, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
305.88	1.68	100		100% MUDSTONE	GREY, WEAK ROCK.
306.55	0.67	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
307.11	0.56	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
307.44	0.33	100		100% MUDSTONE	GREY, WEAK ROCK, THINLY LAMINATED.
314.28	6.84	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: GRADING TO MEDIUM IN PART; FRIABLE IN PART
314.34	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
314.52	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK. NOTE: CLOSELY FRACTURED IN BASAL 4 CM.
314.72	0.20	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
314.93	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
314.98	0.05	100		100% CLAYSTONE	LIGHT BROWN, SOFT, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
315.92	0.94	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK. NOTE: FISSILE AND FINELY FRACTURED IN BASAL 12 CM.
316.04	0.12	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
316.08	0.04	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
316.30	0.22	100		100% CLAYSTONE	FISSILE, GREY, STIFF, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
316.40	0.10	100		100% MUDSTONE	GREY, WEAK ROCK.
316.62	0.22	100		100% CLAYSTONE	FISSILE, GREY, STIFF. NOTE: FINELY FRACTURED IN BASAL 8 CM.
316.67	0.05	100		100% CLAYSTONE	FISSILE, CREAM, FIRM, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
317.00	0.33	100		60% MUDSTONE 40% MUDSTONE	GREY. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
317.08	0.08	100	8	100% CARBONACEOUS SHALE	

TOP OF DALMAYNE D LOWER : 212.92 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
317.15	0.07	0	9	CORE LOSS	NOTE: CORE LOSS
317.19	0.04	100	9	100% COAL, HEAVY DULL	MUDSTONE, BANDS.
317.51	0.32	100	9	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
317.56	0.05	100	9	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WITH MUD PELLETS.
318.01	0.45	100	9	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS. NOTE: GRADING TO DULL COAL IN PART; MUD PELLETS IN UPPER 15 CM.
318.14	0.13	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	
318.41	0.27	100	9	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
318.45	0.04	100	9	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
318.46	0.01	100	9	100% COAL, BRIGHT	
318.52	0.06	100	9	50% COAL, BRIGHT 50% CARBONACEOUS SHALE	THINLY LAMINATED.
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.44 M; SAMPLED THICKNESS= 1.44 M	
318.72	0.20	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
318.75	0.03	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK BROWN, WEAK ROCK.
319.24	0.49	100		100% MUDSTONE	GREY. MODERATELY WEAK ROCK.
319.36	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
319.38	0.02	100		100% COAL, BRIGHT	
319.56	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
319.65	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
320.06	0.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
320.34	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
324.72	4.38	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART; FRIABLE IN PART
325.06	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
330.53	5.47	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART;
331.48	0.95	100		100% SANDST	...ATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
332.21	0.73	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
343.00	10.79	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART; LARGE CARB. LENSES AT 336.05 M.
343.54	0.54	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, LIGHT GREY, WITH BANDS OF CALCITE, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
349.98	6.44	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK. NOTE: CALCAREOUS IN PART; FRIABLE IN PART
349.99	0.01	100		100% CLAYSTONE	SHALY, BUFF, SOFT.
350.00	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
350.06	0.06	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
350.08	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
351.64	1.56	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
352.00	0.36	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	CARBONACEOUS, TRACES, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH SLUMP STRUCTURES, WITH LOAD CASTS.
354.37	2.37	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED. NOTE: CLOSELY JOINTED IN PART
354.46	0.09	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH LOAD CASTS.
354.91	0.45	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
355.36	0.45	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH LOAD CASTS.
356.04	0.68	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
356.10	0.06	100		100% COAL, HEAVY DULL	
356.22	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
356.24	0.02	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
356.43	0.19	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
356.59	0.16	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
358.11	1.52	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
359.00	0.89	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
360.79	1.79	100		100% MUDSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
361.31	0.52	100		50% MUDSTONE 30% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
361.57	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
361.83	0.26	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
362.62	0.79	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
362.68	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
362.82	0.14	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, FISSILE, DARK BROWN. GREY. WEAK ROCK, THICKLY LAMINATED.
362.88	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E : 167.12 M R.L.	
362.90	0.02	100		100% COAL, BRIGHT	
362.95	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE E : THICKNESS= 0.07 M; SAMPLED THICKNESS= 0.00 M	
362.96	0.01	100		100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
363.10	0.14	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
363.68	0.58	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
363.86	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
364.03	0.17	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
364.43	0.40	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
365.10	0.67	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: CORE LOSS
365.20	0.10	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
367.73	2.53	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
367.84	0.11	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
368.04	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
368.06	0.02	100		100% MUDSTONE	SILTSTONE, CREAM, MODERATELY WEAK ROCK.
368.10	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
368.16	0.06	100		100% COAL, HEAVY DULL	
368.22	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
368.23	0.01	100		100% SHALE	BROWN, SOFT, WITH PLANT REMAINS.
368.29	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
368.30	0.01	100		100% COAL, BRIGHT	
368.32	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
368.35	0.03	100		100% CLAYSTONE	LIGHT BROWN, SOFT.
368.38	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
368.40	0.02	100		100% COAL, BRIGHT	
368.45	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
368.49	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
368.78	0.29	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
368.87	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
369.40	0.53	100		100% MUDSTONE	CARBONACEOUS, GREY, MODERATELY WEAK ROCK.
369.84	0.44	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
371.15	1.31	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
					NOTE: FRIABLE IN UPPER 50 CM; CALCITE BAND AT 370.39 M.
372.53	1.38	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
373.53	1.00	0		CORE LOSS	
					NOTE: CORE LOSS
373.58	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
373.68	0.10	100		100% MUDSTONE	SANDSTONE, LENSES, BROWN-BLACK, MODERATELY WEAK ROCK.
373.71	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
374.02	0.31	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					NOTE: ABUNDANT CARB. LENSES AND LAMINAE
375.36	1.34	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
375.59	0.23	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
375.65	0.06	100		100% CARBONACEOUS SHALE	MUDSTONE, LAMINAE, STIFF.
375.67	0.02	100		100% COAL, HEAVY DULL	
375.74	0.07	100		100% SANDSTONE	VERY FINE GRAINED, CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
375.86	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
375.91	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
375.97	0.06	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
376.11	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
377.00	0.89	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
					NOTE: CLOSELY FRACTURED NEAR BASE
377.49	0.49	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
377.97	0.48	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
					NOTE: CLOSELY JOINTED AT TOP AND BASE
379.14	1.17	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	SILTSTONE, STREAKS, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
380.21	1.07	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
381.20	0.99	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
383.09	1.89	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
383.23	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
383.40	0.17	0		CORE LOSS	NOTE: CORE LOSS
384.05	0.65	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
384.57	0.52	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
386.51	1.94	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
					*** CORE DESCRIPTION ***
					NOTE: ABUNDANT MUDSTONE AND CARB. LENSES AND LAMINAE
387.48	0.97	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
388.27	0.79	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
388.46	0.19	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
388.48	0.02	100		100% CLAYSTONE	FISSILE, BROWN, SOFT.
388.50	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
388.57	0.07	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
388.72	0.15	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
389.00	0.28	100		100% SANDSTONE	MUDSTONE, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
					NOTE: FINE GRADING TO MEDIUM
389.35	0.35	100		100% MUDSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
392.04	2.69	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: ABUNDANT MUDSTONE AND CARB. LENSES AND LAMINAE
411.70	19.66	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
					NOTE: MUDSTONE AND CARB. BANDS AND LENSES IN PART; CLOSELY FRACTURED FROM 406.5 - 407.5 M; GREENISH TINGE IN PART
413.65	1.95	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
418.55	4.90	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
					NOTE: CLOSELY JOINTED AND FRACTURED IN PART
419.43	0.88	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
419.44	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
419.49	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, THINLY LAMINATED.
419.54	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
420.03	0.49	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
420.72	0.69	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, GREY-BROWN. MODERATELY WEAK ROCK, THINLY BEDDED.
421.50	0.78	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
421.69	0.19	100		70% MUDSTONE 20% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
423.03	1.34	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
423.41	0.38	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, TRACES, LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
423.46	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
423.83	0.37	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
424.48	0.65	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
424.86	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
425.15	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
425.92	0.77	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
426.38	0.46	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
426.63	0.25	100		50% MUDSTONE 50% CLAYSTONE	CARBONACEOUS, BROWN-BLACK. FISSILE, LIGHT BROWN. WITH LENSES OF CALCITE, VERY WEAK ROCK.
426.84	0.21	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
426.97	0.13	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
428.00	1.03	100		100% SANDSTONE	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION. NOTE: FINE GRADING TO MEDIUM; FINELY FRACTURED IN PART
428.22	0.22	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
428.29	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
428.51	0.22	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
428.99	0.48	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
429.40	0.41	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
429.45	0.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
429.52	0.07	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
431.01	1.49	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
431.03	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
431.12	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
431.14	0.02	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, CREAM, MODERATELY WEAK ROCK.
431.17	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
431.20	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
431.44	0.24	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
432.85	1.41	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH BURROWING.
433.12	0.27	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
433.96	0.84	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, FRIABLE, LIGHT GREY, MODERATELY WEAK ROCK.
434.01	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
434.41	0.40	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
434.92	0.51	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
435.32	0.40	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
435.37	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEAK ROCK.
435.41	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, THINLY LAMINATED.
436.67	1.26	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
436.80	0.13	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, THINLY LAMINATED.
436.84	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, CREAM, MODERATELY WEAK ROCK.
437.49	0.65	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
437.98	0.49	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH BURROWING.
438.38	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, CREAM, MODERATELY WEAK ROCK. NOTE: SLIGHTLY CALCAREOUS
438.87	0.49	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, CREAM, MODERATELY WEAK ROCK, WITH BURROWING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
439.11	0.24	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
439.20	0.09	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
439.69	0.49	100		100% SANDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, WITH POOR SORTING. NOTE: FINE GRADING TO COARSE,GREENISH GRIT AT BASE
439.76	0.07	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
445.12	5.36	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK. NOTE: GRADING TO POORLY SORTED SANDSTONE IN BASAL METRE; CLOSELY JOINTED AND FRACTURED IN PART
452.00	6.88	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK. NOTE: CALCITE VEINLETS AT 450 M.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	4.29 M	215.05 - 219.34 M	4.29 M
DC	0.00 M	243.15 - 247.77 M	4.62 M
DDU	1.77 M	302.15 - 303.92 M	1.77 M
DDL	1.44 M	317.08 - 318.52 M	1.44 M
DE	0.00 M	362.88 - 362.95 M	0.07 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	215.05 - 216.17 M	1.12 M
2	216.17 - 216.75 M	0.58 M
3	216.75 - 217.54 M	0.79 M
4	217.54 - 217.88 M	0.34 M
5	217.88 - 219.34 M	1.46 M
6	301.85 - 302.15 M	0.30 M
7	302.15 - 303.92 M	1.77 M
8	317.00 - 317.08 M	0.08 M
9	317.08 - 318.52 M	1.44 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 5

HOLE TYPE	CORE	
EASTING	592,400 M	GRID
NORTHING	5,370,800 M	GRID
ELEVATION	470.00 M	
TOTAL DEPTH DRILLED	455.00 M	
DRILLING STARTED	8/ 8/78	
DRILLING TIME	25 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
12.00	12.00			100% DOLERITE	SCREE.
13.10	1.10	60		100% DOLERITE	MED.-COARSE GRAINED, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
16.19	3.09	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
23.00	6.81	100		100% DOLERITE	MED.-COARSE GRAINED, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS.
24.50	1.50	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
26.66	2.16	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
36.20	9.54	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
41.09	4.89	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
44.63	3.54	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS.
47.47	2.84	100		100% DOLERITE	MED.-COARSE GRAINED, STRONGLY FRAGMENTED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, SLIGHTLY WEATHERED, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
50.28	2.81	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
56.84	6.56	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
73.68	16.84	100		100% DOLERITE	MED.-COARSE GRAINED, STRONGLY FRAGMENTED, GREY, WITH TALC ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
87.57	13.89	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
88.58	1.01	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.60	1.02	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREEN, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
92.52	2.92	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREEN, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
100.56	8.04	100		100% DOLERITE	MED.-FINE GRAINED, BADLY BROKEN, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS.
101.20	0.64	100		100% DOLERITE	FINE GRAINED, BADLY BROKEN, GREY, WITH CALCITE ON JOINTS AND TALC ON JOINTS, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS.
101.55	0.35	100		100% SANDSTONE,COARSE GRAINED	CREAM, MODERATELY WEAK ROCK.
102.16	0.61	100		100% MUDSTONE	BAKED, FERRUGINOUS, YELLOW-BROWN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
103.44	1.28	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LENSES, LIGHT GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
106.69	3.25	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
106.97	0.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
111.32	4.35	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, WITH CHLORITE ON JOINTS AND TALC ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
112.23	0.91	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
112.70	0.47	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
114.96	2.26	100		100% SANDSTONE	MED.-COARSE GRAINED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
116.00	1.04	60		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
119.44	3.44	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, LENSES, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CROSS LAMINATION.
121.17	1.73	100		70% SANDSTONE 30% PEBBLE CONGLOMERATE	VERY COARSE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK.
122.70	1.53	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.90	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
125.72	2.82	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
126.05	0.33	40		100% MUDSTONE	SILTSTONE, BADLY BROKEN, LIGHT GREY, VERY WEAK ROCK.
126.34	0.29	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
127.14	0.80	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.27	1.13	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
130.85	2.58	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
131.74	0.89	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
132.99	1.25	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
134.11	1.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
141.53	7.42	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
141.62	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
141.83	0.21	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROW MODERATELY WEAK ROCK.
143.10	1.27	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
143.71	0.61	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
143.85	0.14	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
143.86	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
143.90	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
143.94	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	CARBONACEOUS, LAMINAE, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.08	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT, MODERATELY WEAK ROCK.
144.10	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.12	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
144.15	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
144.18	0.03	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
144.20	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.21	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
144.28	0.07	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
144.31	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.41	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, WITH CALCITE ON CLEAT AND LIMONITE ON CLEAT.
144.51	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, WITH LIMONITE ON CLEAT, MODERATELY STRONG ROCK.
144.65	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
144.71	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH CALCITE ON CLEAT.
144.75	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
144.79	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
144.83	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
144.88	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
144.97	0.09	100		100% COAL, DULL	
144.99	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
145.59	0.60	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
146.03	0.44	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
146.26	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK.
146.56	0.30	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, JOINTS DIP 90 DEG.
146.84	0.28	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, BEDS DIP 10 DEG.
146.99	0.15	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN-BLACK, WEAK ROCK.
147.15	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
147.27	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
147.33	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
147.63	0.30	100		100% COAL, INTERBANDED DULL AND BRIGHT	HEAVY DULL COAL, BANDS, WITH CALCITE ON CLEAT.
148.31	0.68	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.28	0.97	100		100% SILTSTONE	SANDSTONE, BANDS, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
164.28	15.00	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,MEDIUM GRAINED	FRIABLE, BANDS, LIGHT GREY. CALCAREOUS, LIGHT GREY. MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
164.43	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
164.51	0.08	100		100% MUDSTONE	CARBONACEOUS, STREAKS, YELLOW-GREY, MODERATELY WEAK ROCK.
164.73	0.22	100		100% SILTSTONE	BADLY BROKEN, GREY-BROWN, VERY WEAK ROCK.
164.83	0.10	100		100% CLAYSTONE	YELLOW-GREY, VERY WEAK ROCK.
164.87	0.04	100		100% CLAYSTONE	YELLOW-GREY, SOFT.
165.04	0.17	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK, VERY WEAK ROCK.
165.21	0.17	100		100% MUDSTONE	BADLY BROKEN, DARK GREY, SOFT.
165.34	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
165.58	0.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
166.82	1.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
167.00	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
167.05	0.05	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
167.64	0.59	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
168.14	0.50	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
168.43	0.29	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
168.64	0.21	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
169.09	0.45	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
169.39	0.30	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
170.30	0.91	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.62	0.32	100		50% SANDSTONE 50% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, WITH LOAD CASTS.
171.42	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.42	3.00	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
175.76	1.34	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
176.61	0.85	100		100% SANDSTONE,MEDIUM GRAINED	BRIGHT COAL, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
176.89	0.28	100		100% MUDSTONE	BADLY BROKEN, FISSILE, CREAM, VERY WEAK ROCK.
193.52	16.63	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.97	3.45	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
197.79	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
199.31	1.52	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
				TOP OF DALMAYNE B : 270.69 M R.L.	
200.30	0.99	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BUFF. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
200.51	0.21	0		CORE LOSS	
201.62	1.11	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. ARENACEOUS, BANDS, BUFF. MODERATELY WEAK ROCK, THINLY BEDDED.
201.69	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
201.89	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
201.98	0.09	100		100% CLAYSTONE	ARENACEOUS, CREAM, WEAK ROCK.
202.50	0.52	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, STREAKS, LIGHT BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
202.67	0.17	100		100% CLAYSTONE	FISSILE, CREAM, STIFF, RAPID SLAKING.
202.74	0.07	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
202.81	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
202.85	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
202.89	0.04	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
202.95	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
203.09	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
203.13	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
203.29	0.16	100		100% CLAYSTONE	CREAM, VERY WEAK ROCK, SLOW SLAKING.
203.57	0.28	100		100% CLAYSTONE	FISSILE, CREAM, STIFF, RAPID SLAKING.
203.64	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
203.70	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
203.79	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
				BASE OF DALMAYNE B : THICKNESS= 4.48 M; SAMPLED THICKNESS= 0.00 M	
203.96	0.17	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
205.06	1.10	100		100% SILTSTONE	GREY, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
205.23	0.17	100		100% MUDSTONE	FISSILE, YELLOW-GREY, VERY WEAK ROCK.
206.00	0.77	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
206.06	0.06	100		100% CLAYSTONE	GREY-BROWN, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.
206.15	0.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
206.52	0.37	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
206.66	0.14	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
207.21	0.55	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
207.53	0.32	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
208.22	0.69	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
209.03	0.81	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
210.99	1.96	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
211.55	0.56	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
212.45	0.90	100		100% CLAYSTONE	SILTSTONE, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
224.42	11.97	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
225.16	0.74	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
225.81	0.65	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
226.25	0.44	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
226.92	0.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
227.58	0.66	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
227.62	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
227.64	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
227.66	0.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
227.68	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
227.70	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
227.78	0.08	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
228.05	0.27	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
228.54	0.49	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
229.39	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
230.07	0.68	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
231.68	1.61	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH LOAD CASTS.
232.39	0.71	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.

TOP OF DALMAYNE C : 237.61 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
232.96	0.57	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
233.00	0.04	100		100% CLAYSTONE	LIGHT GREY, VERY WEAK ROCK.
233.44	0.44	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
233.59	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
233.74	0.15	100		100% CLAYSTONE	FISSILE, LIGHT GREY, VERY WEAK ROCK.
233.79	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
234.36	0.57	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS.
				BASE OF DALMAYNE C : THICKNESS= 1.97 M; SAMPLED THICKNESS= 0.00 M	
234.51	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
234.87	0.36	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
235.58	0.71	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
235.85	0.27	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
236.05	0.20	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
236.23	0.18	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
245.09	8.86	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
245.82	0.73	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
253.75	7.93	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
253.85	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
255.60	1.75	100		100% SANDSTONE,COARSE GRAIHED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
255.80	0.20	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, WHITE, WITH BANDS OF CALCITE, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.68	0.88	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
256.91	0.23	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, WHITE, WITH BANDS OF CALCITE, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
260.36	3.45	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
262.84	2.48	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
262.98	0.14	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.14	0.16	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
263.18	0.04	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
263.21	0.03	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
263.24	0.03	100	2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
263.59	0.35	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
263.62	0.03	100	2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
263.69	0.07	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.72	0.03	100	2	100% MUDSTONE	GREY-BROWN, WEAK ROCK.
263.76	0.04	100	2	100% CLAYSTONE	LIGHT BROWN, FIRM.
				TOP OF : 206.24 M R.L.	
263.93	0.17	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
263.99	0.06	100	3	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
264.04	0.05	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
264.15	0.11	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
264.56	0.41	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
264.57	0.01	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
264.71	0.14	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
264.83	0.12	100	4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
264.87	0.04	100	5	100% COAL, HEAVY DULL	
264.88	0.01	100	5	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
264.91	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
265.03	0.12	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
265.05	0.02	100	5	100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
265.14	0.09	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
265.16	0.02	100	5	100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK.
265.26	0.10	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
265.62	0.36	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
265.88	0.26	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	HEAVY DULL COAL, BANDS.
265.90	0.02	100	5	100% COAL, BRIGHT	
266.00	0.10	100	5	50% COAL, BRIGHT 50% CARBONACEOUS SHALE	THINLY LAMINATED.
				BASE OF : THICKNESS= 2.24 M; SAMPLED THICKNESS= 2.24 M	
266.05	0.05	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK BROWN, WEAK ROCK.
266.16	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
266.54	0.38	100		100% MUDSTONE	COALY, TRACES, GREY, MODERATELY WEAK ROCK, LAMINATED.
267.17	0.63	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
267.30	0.13	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
267.79	0.49	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
267.81	0.02	100		100% CARBONACEOUS SHALE	COALY, LAMINAE.
267.89	0.08	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
267.95	0.06	100		100% CARBONACEOUS SHALE	COALY, LAMINAE.
268.05	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
268.36	0.31	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
268.59	0.23	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
268.61	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
268.85	0.24	100		100% MUDSTONE	FISSILE, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
269.28	0.43	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	MUDSTONE, LAMINAE, GREY. FISSILE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
287.65	18.37	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
287.72	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
289.84	2.12	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
291.36	1.52	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 20 DEG., WITH CROSS LAMINATION.
291.48	0.12	100		60% SANDSTONE,COARSE GRAINED 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
292.36	0.88	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
293.40	1.04	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
304.70	11.30	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
304.85	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
304.94	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
304.98	0.04	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
305.06	0.08	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
305.60	0.54	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
306.65	1.05	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
307.83	1.18	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
308.85	1.02	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
309.10	0.25	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
310.47	1.37	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
310.65	0.18	100		100% CALCITE	SANDSTONE, BANDS, WHITE, MODERATELY WEAK ROCK.
314.82	4.17	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
314.97	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
332.23	17.26	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
334.98	2.75	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
335.12	0.14	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
335.35	0.23	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
335.78	0.43	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
336.37	0.59	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. GREY-BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
337.10	0.73	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
337.60	0.50	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
338.00	0.40	0		CORE LOSS	
338.02	0.02	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
338.14	0.12	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
339.06	0.92	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, LAMINATED.
340.63	1.57	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. SANDSTONE, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
341.40	0.77	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
346.74	5.34	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
346.99	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
350.26	3.27	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
350.89	0.63	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
352.80	1.91	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
352.90	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
353.07	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
353.88	0.81	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
354.38	0.50	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
354.46	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
354.69	0.23	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
355.09	0.40	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, LAMINATED.
355.30	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
355.53	0.23	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
355.93	0.40	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
356.37	0.44	100		100% SANDSTONE	VERY FINE GRAINED, CREAM, MODERATELY WEAK ROCK.
356.63	0.26	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
356.84	0.21	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
356.94	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
357.40	0.46	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, LAMINATED.
357.80	0.40	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
358.80	1.00	0		CORE LOSS	
359.05	0.25	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
359.35	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
359.61	0.26	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
360.87	1.26	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
363.15	2.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
363.80	0.65	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
364.25	0.45	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
364.37	0.12	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
364.59	0.22	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY-BROWN. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
365.07	0.45	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
365.23	0.16	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
366.13	0.90	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
366.61	0.48	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
367.08	0.47	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
367.40	0.32	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
367.57	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
367.62	0.05	100	6	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
367.66	0.04	100	6	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
367.70	0.04	100	6	100% MUDSTONE	BROWN, WEAK ROCK.
		TOP OF	DALMAYNE E2 : 102.30 M R.L.		
367.84	0.14	100	7	100% COAL, HEAVY DULL	
367.86	0.02	100	7	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
368.02	0.16	100	7	100% COAL, HEAVY DULL	
368.13	0.11	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
368.20	0.07	100	7	100% COAL, HEAVY DULL	
368.49	0.29	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	MUDSTONE, LAMINAE.
		BASE OF	DALMAYNE E2 : THICKNESS= 0.79 M; SAMPLED THICKNESS= 0.79 M		
368.50	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
369.17	0.67	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, BROWN, MODERATELY WEAK ROCK.
369.55	0.38	100		100% CLAYSTONE	GREY, VERY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
370.11	0.56	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
370.40	0.29	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
371.16	0.76	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
377.35	6.19	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
377.68	0.33	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
378.00	0.32	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
379.00	1.00	0		CORE LOSS	
379.21	0.21	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
380.60	1.39	80		100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
381.60	1.00	80		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
382.35	0.75	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
383.70	1.35	80		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
383.92	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
384.83	0.91	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
385.50	0.67	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
386.35	0.85	90		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH BANDS OF CLAY, MODERATELY WEAK ROCK, LAMINATED.
386.50	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
388.30	1.80	100		50% SILTSTONE 50% SANDSTONE	CARBONACEOUS, STREAKS, GREY. MED.-FINE GRAINED. MODERATELY WEAK ROCK, THINLY LAMINATED.
389.52	1.22	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
389.54	0.02	100		100% CLAYSTONE	FISSILE, BUFF, WITH LENSES OF CALCITE, STIFF.
390.00	0.46	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
390.18	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
390.44	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
390.46	0.02	100		100% CLAYSTONE	FISSILE, BUFF, STIFF.
391.14	0.68	100		50% MUDSTONE 50% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
392.07	0.93	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
392.95	0.88	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
393.36	0.41	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, WITH FRAGMENTS OF CALCITE, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
393.74	0.38	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
393.84	0.10	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
394.82	0.98	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
395.33	0.51	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
396.55	1.22	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
399.75	3.20	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
401.93	2.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH POOR SORTING.
402.23	0.30	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
402.45	0.22	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
403.58	1.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH POOR SORTING.
404.00	0.42	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
404.98	0.98	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
406.60	1.62	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
406.79	0.19	100		50% SILTSTONE 50% SANDSTONE	GREY. MED.-COARSE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 60 DEG., WITH CARBONACEOUS WISPS.
406.84	0.05	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
407.18	0.34	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
407.27	0.09	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
407.51	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
410.00	2.49	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
410.98	0.98	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
411.65	0.67	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
412.24	0.59	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
412.48	0.24	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
412.62	0.14	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
416.00	3.38	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
416.27	0.27	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
416.88	0.61	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
417.02	0.14	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
418.20	1.18	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
419.65	1.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
420.95	1.30	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, LAMINATED.
421.45	0.50	100		100% LIMESTONE	LIGHT GREY, MODERATELY WEAK ROCK.
422.22	0.77	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
424.84	2.62	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
425.10	0.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
431.62	6.52	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
432.36	0.74	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
432.55	0.19	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
432.60	0.05	100		50% COAL, DULL 50% MUDSTONE	ARENACEOUS, GREY-BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
432.68	0.08	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
433.16	0.48	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
433.22	0.06	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
433.28	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
434.36	1.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK, WITH BURROWING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
435.21	0.85	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT BROWN. GREY-BROWN. WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, THINLY LAMINATED.
435.36	0.15	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
435.58	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
435.82	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
435.91	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, LAMINATED.
435.95	0.04	100		100% SANDSTONE	VERY FINE GRAINED, BROWN, MODERATELY WEAK ROCK.
436.09	0.14	100		100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY WEAK ROCK.
436.37	0.28	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, LAMINATED.
436.67	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
436.78	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
436.92	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
438.13	1.21	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	MODERATELY WEAK ROCK, THINLY LAMINATED.
438.62	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
438.85	0.23	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
439.55	0.70	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY-GREEN. SILTSTONE, GREY-GREEN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
439.76	0.21	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
440.09	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
440.50	0.41	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
440.66	0.16	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY STRONG ROCK.
441.04	0.38	100		100% MUDSTONE	SILTSTONE, GREY-GREEN, MODERATELY WEAK ROCK, LAMINATED.
441.34	0.30	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
442.20	0.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, MODERATELY WEAK ROCK.
444.77	2.57	100		60% MUDSTONE 40% MUDSTONE	SILTSTONE, GREY. SILTSTONE, GREEN. MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
445.61	0.84	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
445.89	0.28	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
446.41	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
447.26	0.85	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, LAMINAE, LIGHT GREEN, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
449.00	1.74	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH FRAGMENTS OF CALCITE AND LAMINAE OF MICA, MODERATELY WEAK ROCK.
452.74	3.74	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, WITH STREAKS OF MICA, MODERATELY WEAK ROCK.
453.39	0.65	100		100% LIMESTONE	SANDSTONE, FRAGMENTS, CREAM, MODERATELY STRONG ROCK.
455.00	1.61	100		100% SANDSTONE	MED.-COARSE GRAINED, ARGILLACEOUS, LIGHT GREEN, WITH STREAKS OF MICA, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	199.31 - 203.79 M	4.48 M
DC	0.00 M	232.39 - 234.36 M	1.97 M
DC1	2.24 M	263.76 - 266.00 M	2.24 M
DE2	0.79 M	367.70 - 368.49 M	0.79 M

SAMPLE SUMMARY:

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	262.84 - 263.18 M	0.34 M
2	263.18 - 263.76 M	0.58 M
3	263.76 - 264.56 M	0.80 M
4	264.56 - 264.83 M	0.27 M
5	264.83 - 266.00 M	1.17 M
6	367.57 - 367.70 M	0.13 M
7	367.70 - 368.49 M	0.79 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 6

HOLE TYPE	CORE	
EASTING	602,000 M	GRID
NORTHING	5,381,000 M	GRID
ELEVATION	440.00 M	
TOTAL DEPTH DRILLED	151.70 M	
DRILLING STARTED	22/ 8/78	
DRILLING TIME	16 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
15.10	15.10	80		100% DOLERITE	BADLY BROKEN, FERRUGINOUS, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
18.50	3.40	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, MODERATELY WEATHERED, STRONG ROCK.
29.00	10.50	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, SLIGHTLY WEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS. NOTE: VARIABLE DIP AND TYPE OF JOINTS
32.00	3.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS. NOTE: VARIABLE DIP AND TYPE OF JOINTS
32.85	0.85	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY, WITH TALC ON JOINTS, STRONG ROCK.
36.00	3.15	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS. NOTE: VARIABLE DIP AND TYPE OF JOINTS
37.00	1.00	100		100% DOLERITE	ORANGE-GREY, WITH TALC ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
81.50	44.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, WIDELY SPACED JOINTS. NOTE: VARIABLE DIP AND TYPE OF JOINTS, SOME CALCITE AND CHLORITE ALONG JOINTS
91.00	9.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
93.25	2.25	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
93.60	0.35	100		100% DOLERITE	FINE GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
93.80	0.20	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
93.87	0.07	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK. NOTE: BAKED
94.16	0.29	100		100% MUDSTONE	CARBONACEOUS, TRACES, CREAM, MODERATELY WEAK ROCK. NOTE: BAKED
94.46	0.30	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK. NOTE: SLIGHTY BURNT; CALCITE STREAKS
95.08	0.62	100		100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
96.95	1.87	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY-BROWN. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
98.10	1.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
98.25	0.15	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
99.55	1.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK. NOTE: CALCITE INFILLED FRACTURES IN PART
99.73	0.18	100		100% MUDSTONE	CREAM, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
100.23	0.50	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
100.53	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WEAK ROCK. NOTE: REVERSE FAULT AT BASE
100.80	0.27	100		100% MUDSTONE	BADLY BROKEN, DARK GREY, WEAK ROCK.
100.90	0.10	0		CORE LOSS	NOTE: CORE LOSS
101.21	0.31	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK.
102.08	0.87	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., WITH LOAD CASTS.
102.30	0.22	100		10[illegible]% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
102.36	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
102.72	0.36	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
102.80	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
105.50	2.70	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, BEDS DIP 50 DEG., WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
105.64	0.14	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 60 DEG.
106.07	0.43	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 50 DEG.
106.90	0.83	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 50 DEG.
107.05	0.15	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 50 DEG.
107.15	0.10	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 45 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
108.00	0.85	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
110.00	2.00	100		80% MUDSTONE 20% COAL, HEAVY DULL	CARBONACEOUS, STRONGLY FRAGMENTED, BROWN-BLACK. STRONGLY FRAGMENTED. MODERATELY STRONG ROCK.
114.36	4.36	100		50% SANDSTONE 50% MUDSTONE	LITHIC, MICACEOUS, GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
116.00	1.64	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
116.60	0.60	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, DARK GREY. GREY-GREEN. UNWEATHERED, WEAK ROCK.
116.82	0.22	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.82	1.00	100		50% MUDSTONE 50% SANDSTONE	CARBONACEOUS, BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY STRONG ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION.
118.50	0.68	100		100% SANDSTONE	CARBONACEOUS, FINE GRAINED, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
119.40	0.90	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
125.05	5.65	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
125.60	0.55	100		100% DOLERITE	FINE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
128.00	2.40	100		100% SANDSTONE	MEDIUM GRAINED, MICACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
131.60	3.60	100		100% SANDSTONE	MED.-COARSE GRAINED, MICACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
132.10	0.50	100		100% SANDSTONE	CONGLOMERATIC, MICACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
136.50	4.40	100		100% SANDSTONE	MED.-COARSE GRAINED, MICACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
137.00	0.50	100		100% SANDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
140.10	3.10	100		100% SANDSTONE	MEDIUM GRAINED, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
143.00	2.90	65		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK.
143.70	0.70	40		100% MUDSTONE	MUDSTONE, FAULT GOUGE, LIGHT GREY, UNWEATHERED, WEAK ROCK.
144.20	0.50	50		100% MUDSTONE	CARBONACEOUS, FAULT GOUGE, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 45 DEG.
144.25	0.05	100		100% MUDSTONE	FAULT GOUGE, BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 45 DEG.
146.60	2.35	100		100% MUDSTONE	COALY, FAULT GOUGE, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 45 DEG.
149.50	2.90	100		100% MUDSTONE	FRAGMENTED, LIGHT GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
150.50	1.00	100		100% MUDSTONE	STRONGLY FRAGMENTED, FAULT GOUGE, LIGHT GREY, UNWEATHERED, VERY WEAK ROCK.
151.00	0.50	100		70% MUDSTONE 30% SANDSTONE	STRONGLY FRAGMENTED, GREY. FINE GRAINED, STRONGLY FRAGMENTED, DARK GREY.
151.70	0.70	100		100% SANDSTONE	FINE GRAINED, STRONGLY FRAGMENTED, GREY.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

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HOLE TYPE	CORE	
EASTING	602,050 M	GRID
NORTHING	5,381,000 M	GRID
ELEVATION	445.00 M	
TOTAL DEPTH DRILLED	341.00 M	
DRILLING STARTED	8/ 9/78	
DRILLING TIME	25 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
12.53	12.53	80		100% DOLERITE	FERRUGINOUS, STAINING, GREY, MODERATELY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
20.55	8.02	70		100% DOLERITE	BADLY BROKEN, FERRUGINOUS, YELLOW-GREY, HIGHLY WEATHERED, WEAK ROCK.
37.19	16.64	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
41.10	3.91	100		100% DOLERITE	FERRUGINOUS, STAINING, ORANGE-GREY, WITH CALCITE ON JOINTS AND CHLORITE ON JOINTS, MODERATELY WEATHERED, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
43.11	2.01	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
52.59	9.48	100		100% DOLERITE	FERRUGINOUS, STAINING, GREY, WITH CALCITE ON JOINTS, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
54.75	2.16	100		100% DOLERITE	FERRUGINOUS, STAINING, YELLOW-GREY, WITH CALCITE ON JOINTS, MODERATELY WEATHERED, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
66.78	12.03	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
100.27	33.49	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.14	27.87	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
134.36	6.22	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS.
172.50	38.14	100		100% DOLERITE	MEDIUM GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
187.54	15.04	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
188.54	1.00	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
192.35	3.81	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
193.10	0.75	100		100% MUDSTONE	DARK GREY, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
194.96	1.86	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
199.49	4.53	100		100% SANDSTONE	VERY FINE GRAINED, ARGILLACEOUS, GREY, MODERATELY WEAK ROCK.
202.33	2.84	100		100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREEN, MODERATELY WEAK ROCK.
202.77	0.44	100		100% SANDSTONE,COARSE GRAINED	LIMONITIC, LIGHT GREY, MODERATELY WEAK ROCK, BEDS DIP 20 DEG.
203.80	1.03	100		100% SANDSTONE,COARSE GRAINED	LIMONITIC, LIGHT GREEN, MODERATELY WEAK ROCK.
204.80	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
206.32	1.52	100		100% SANDSTONE,COARSE GRAINED	LIMONITIC, LIGHT GREY, WEAK ROCK.
208.55	2.23	100		100% SANDSTONE	VERY COARSE GRAINED, LIMONITIC, LIGHT GREY, WEAK ROCK.
208.84	0.29	100		100% MUDSTONE	GREY, WEAK ROCK.
211.32	2.48	90		100% SANDSTONE,COARSE GRAINED	LIMONITIC, LIGHT GREEN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
212.13	0.81	100		100% SANDSTONE	VERY COARSE GRAINED, LIMONITIC, LIGHT GREEN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
215.13	3.00	100		100% SANDSTONE	MED.-COARSE GRAINED, LIMONITIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
215.16	0.03	100		100% MUDSTONE	GREY-GREEN, WEAK ROCK.
			TOP OF DALHAYNE D UPPER : 229.84 M R.L.		
215.72	0.56	31		100% COAL, HEAVY DULL	BLACK, MODERATELY WEAK ROCK.
			BASE OF DALHAYNE D UPPER : THICKNESS= 0.56 M; SAMPLED THICKNESS= 0.00 M		
216.12	0.40	100		100% CLAYSTONE	GREY-BROWN, FIRM, SLOW SLAKING, MODERATELY STICKY.
216.17	0.05	100		100% MUDSTONE	GREY, WEAK ROCK, SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
216.72	0.55	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. WEAK ROCK, THINLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
216.78	0.06	100		100% MUDSTONE	GREY, FIRM.
217.13	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, WEAK ROCK.
217.23	0.10	100		100% SILTSTONE	STRONGLY FRAGMENTED.
217.52	0.29	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, WEAK ROCK.
218.08	0.56	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK.
219.32	1.24	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, WITH PYRITE ON JOINTS, WEAK ROCK, THINLY LAMINATED, BEDS DIP 10 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
220.37	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH PYRITE ON JOINTS, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
220.57	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK.
221.72	1.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WEAK ROCK.
222.62	0.90	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, WITH PYRITE ON JOINTS AND CALCITE ON JOINTS, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
222.91	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WITH CALCITE ON JOINTS, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
223.26	0.35	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, LIGHT GREY, WEAK ROCK.
223.50	0.24	63		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
224.04	0.54	0		CORE LOSS	
				TOP OF DALMAYNE D LOWER : 220.96 M R.L.	
225.72	1.68	0		CORE LOSS	
				NOTE: CORE LOSS INTERPRETED FROM WIRELINE LOGS	
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.68 M; SAMPLED THICKNESS= 0.00 M	
229.25	3.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
229.54	0.29	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
240.68	11.14	100		100% SANDSTONE	MED.-COARSE GRAINED, LIMONITIC, LIGHT GREY, WITH PYRITE ON JOINTS, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
241.51	0.83	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, MODERATELY WEAK ROCK.
242.08	0.57	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, MODERATELY WEAK ROCK.
242.16	0.08	100		100% MUDSTONE	SHALY, GREY, WEAK ROCK.
242.27	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREY, WEAK ROCK.
247.50	5.23	80		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
247.85	0.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
248.60	0.75	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
249.04	0.44	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
249.27	0.23	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED.
249.31	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WEAK ROCK.
249.83	0.52	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED.
250.85	1.02	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, STREAKS, LIGHT GREY. WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
251.80	0.95	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
252.20	0.40	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, LAMINATED.
252.97	0.77	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
254.00	1.03	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
254.06	0.06	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
254.10	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
				TOP OF DALMAYNE E : 190.90 M R.L.	
254.24	0.14	100		100% COAL, HEAVY DULL	
254.26	0.02	100		100% COAL, HEAVY DULL	MUDSTONE, LAMINAE.
254.68	0.42	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
				BASE OF DALMAYNE E : THICKNESS= 0.58 M; SAMPLED THICKNESS= 0.00 M	
255.15	0.47	100		100% MUDSTONE	CARBONACEOUS, BANDS, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
255.53	0.38	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, WEAK ROCK, BEDS DIP 30 DEG., WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
256.01	0.48	100		100% MUDSTONE	GREY, WEAK ROCK, BEDS DIP 20 DEG., WITH LOAD CASTS, LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
257.02	1.01	100		100% MUDSTONE	GREY, WEAK ROCK, BEDS DIP 20 DEG., LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
257.27	0.25	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, BEDS DIP 20 DEG., LAMINATED, WITH CROSS LAMINATION.
257.30	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, BEDS DIP 20 DEG., WITH LOAD CASTS.
258.70	1.40	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, BEDS DIP 20 DEG., LAMINATED, WITH LOAD CASTS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
259.90	1.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
262.35	2.45	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, LAMINATED, WITH LOAD CASTS.
262.50	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
262.70	0.20	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH CALCITE ON CLEAT, MODERATELY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
262.74	0.04	100	1	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
262.78	0.04	100	1	100% CARBONACEOUS SHALE	
262.79	0.01	100	1	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
262.86	0.07	100	1	100% COAL, HEAVY DULL	
262.95	0.09	100	1	70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, STREAKS, BROWN. MODERATELY STRONG ROCK, THICKLY LAMINATED.
				TOP OF DALNAYNE E2 : 182.05 M R.L.	
263.23	0.28	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
263.32	0.09	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.92	0.60	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
				BASE OF DALNAYNE E2 : THICKNESS= 0.97 M; SAMPLED THICKNESS= 0.97 M	
263.93	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
263.95	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
263.96	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
264.17	0.21	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
264.65	0.48	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
264.77	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES.
264.79	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
264.81	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT AND PYRITE ON CLEAT.
267.10	2.29	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
268.15	1.05	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
269.40	1.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
270.20	0.80	100		100% SILTSTONE	SANDSTONE, BANDS, GREY-BROWN, BEDS DIP 10 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
270.27	0.07	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
270.64	0.37	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
270.83	0.19	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
270.88	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
271.35	0.47	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
271.45	0.10	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS, LAMINATED.
272.95	1.50	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
273.65	0.70	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. SILTSTONE. MODERATELY WEAK ROCK, LAMINATED, WITH BURROWING.
274.86	1.21	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
274.92	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
275.59	0.67	100		100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
277.90	2.31	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED, WITH LOAD CASTS.
278.10	0.20	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
278.24	0.14	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
280.46	2.22	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, JOINTS DIP 70 DEG.
281.15	0.69	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
282.53	1.38	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
282.95	0.42	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
283.90	0.95	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
284.89	0.99	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK GREY, MODERATELY WEAK ROCK.
285.02	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
285.73	0.71	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
285.88	0.15	100		70% SANDSTONE 30% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
286.03	0.15	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, DARK GREY. CARBONACEOUS, BANDS, LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
286.05	0.02	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE F : 158.95 M R.L.	
286.18	0.13	100	3	100% COAL, HEAVY DULL	
286.25	0.07	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
286.55	0.30	100	3	100% COAL, HEAVY DULL	
286.56	0.01	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
286.61	0.05	100	3	100% COAL, HEAVY DULL	
286.63	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
286.65	0.02	100	3	100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
286.66	0.01	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
286.82	0.16	100	3	100% COAL, HEAVY DULL	
286.92	0.10	100	3	100% COAL, HEAVY DULL	
286.95	0.03	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE F : THICKNESS= 0.90 M; SAMPLED THICKNESS= 0.90 M	
287.00	0.05	0		CORE LOSS	
287.02	0.02	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
287.45	0.43	100		100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
287.64	0.19	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
288.01	0.37	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
288.84	0.83	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, DARK BROWN. MODERATELY WEAK ROCK, THINLY LAMINATED.
289.05	0.21	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
289.22	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
289.45	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.05	0.60	100		100% MUDSTONE	SHALY, GREY-BROWN, MODERATELY WEAK ROCK.
290.38	0.33	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
290.90	0.52	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
291.23	0.33	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
293.73	2.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
294.23	0.50	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, LIGHT GREY, WITH CROSS LAMINATION.
294.57	0.34	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
295.21	0.64	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
296.60	1.39	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
304.56	7.96	100		100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, LIGHT GREY, MODERATELY WEAK ROCK.
304.61	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
304.74	0.13	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH PYRITE ON JOINTS.
304.85	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
304.95	0.10	100		100% COAL, HEAVY DULL	
305.00	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
305.20	0.20	100		100% COAL, HEAVY DULL	
305.29	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
305.45	0.16	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIMONITIC, LIGHT GREY. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH MUD PELLETS.
306.29	0.84	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
307.03	0.74	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
307.45	0.42	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
308.78	1.33	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK.
308.88	0.10	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
309.08	0.20	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, SLOW SLAKING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
309.92	0.84	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
310.23	0.31	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
311.32	1.09	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
311.66	0.34	100		100% MUDSTONE	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
312.61	0.95	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
312.75	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
313.05	0.30	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, LAMINATED.
313.42	0.37	100		100% MUDSTONE	GREY, LAMINATED.
313.47	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
313.53	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING.
313.88	0.35	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
314.00	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING.
314.24	0.24	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
314.67	0.43	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
315.17	0.50	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
315.64	0.47	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN. GREY. MODERATELY WEAK ROCK, LAMINATED.
316.58	0.94	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
317.07	0.49	100		100% MUDSTONE	SILTSTONE, GREY.
319.28	2.21	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, BANDS, GREY. MODERATELY WEAK ROCK, LAMINATED, WITH LOAD CASTS.
319.55	0.27	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
320.67	1.12	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
320.87	0.20	100		100% MUDSTONE	BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
322.14	1.27	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
322.51	0.37	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
322.95	0.44	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
323.88	0.93	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
324.04	0.16	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
324.20	0.16	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
324.25	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
324.37	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
324.49	0.12	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
325.03	0.54	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, QUARTZITIC, CREAM, MODERATELY WEAK ROCK, WITH POOR SORTING, WITH MUD PELLETS.
325.10	0.07	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
325.24	0.14	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
325.43	0.19	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, CREAM, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WITH POOR SORTING, WITH MUD PELLETS.
325.54	0.11	100		100% MUDSTONE	MODERATELY WEAK ROCK, WITH MUD PELLETS.
325.64	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
326.87	1.23	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK.
327.12	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
327.16	0.04	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
327.19	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
327.46	0.27	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
327.75	0.29	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, CREAM, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WITH POOR SORTING.
327.86	0.11	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
328.56	0.70	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY WEAK ROCK, LAMINATED.
328.60	0.04	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
328.69	0.09	100		100% SANDSTONE,COARSE GRAINED	ARGILLACEOUS, GREY, WITH POOR SORTING, WITH MUD PELLETS.
328.95	0.26	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
329.00	0.05	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
329.06	0.06	100		100% COAL, HEAVY DULL	
329.65	0.59	100		100% MUDSTONE	COALY, LENSES, CREAM, MODERATELY WEAK ROCK, WITH MUD PELLETS.
330.42	0.77	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
330.48	0.06	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
331.05	0.57	100		100% SANDSTONE,COARSE GRAINED	CREAM, MODERATELY WEAK ROCK, WITH MUD PELLETS.
331.13	0.08	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, WITH POOR SORTING, WITH LOAD CASTS.
332.02	0.89	100		100% SANDSTONE	VERY COARSE GRAINED, CREAM, WITH FRAGMENTS OF QUARTZ, WITH MUD PELLETS.
334.09	2.07	100		100% SILTSTONE	SANDSTONE, LENSES, GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
337.70	3.61	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
338.19	0.49	100		100% LIMESTONE	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
341.00	2.81	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DDU	0.00 M	215.16 - 215.72 M	0.56 M
DDL	0.00 M	224.04 - 225.72 M	1.68 M
DE	0.00 M	254.10 - 254.68 M	0.58 M
DE2	0.97 M	262.95 - 263.92 M	0.97 M
DF	0.90 M	286.05 - 286.95 M	0.90 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	262.50 - 262.95 M	0.45 M
2	262.95 - 263.92 M	0.97 M
3	286.05 - 286.95 M	0.90 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 7

HOLE TYPE	CORE	
EASTING	593,300 M	GRID
NORTHING	5,375,900 M	GRID
ELEVATION	590.00 M	
TOTAL DEPTH DRILLED	418.92 M	
DRILLING STARTED	3/ 9/78	
DRILLING TIME	13 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.00	4.00	100		100% DOLERITE	ARGILLACEOUS, BADLY BROKEN, ORANGE-BROWN, HIGHLY WEATHERED, WEAK ROCK.
17.50	13.50	100		100% DOLERITE	BADLY BROKEN, ORANGE-GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
21.00	3.50	100		100% DOLERITE	BADLY BROKEN, FISSILE, ORANGE-YELLOW, HIGHLY WEATHERED, VERY WEAK ROCK.
26.50	5.50	100		100% DOLERITE	BADLY BROKEN, GREY-GREEN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
30.50	4.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
42.00	11.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
45.50	3.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
54.00	8.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.00	5.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
60.50	1.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
68.50	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
76.50	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
78.00	1.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
87.50	9.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
94.50	7.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
95.20	0.70	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
95.50	0.30	100		50% DOLERITE 50% CALCITE	BADLY BROKEN. CHLORITIC.
104.00	8.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
117.00	13.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CALCITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.00	7.00	100		100% DOLERITE	MOTTLED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
136.00	12.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
138.90	2.90	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
140.65	1.75	100		100% DOLERITE	CHLORITIC, BADLY BROKEN, GREY-GREEN, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
146.80	6.15	100		100% DOLERITE	FINE GRAINED, CHLORITIC, DARK GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
148.73	1.93	100		100% SANDSTONE	MED.-COARSE GRAINED, GREEN, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
150.07	1.34	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY-GREEN, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
151.52	1.45	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREEN, UNWEATHERED, MODERATELY STRONG ROCK.
151.74	0.22	100		100% PEBBLE CONGLOMERATE	LITHIC, RED-BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
154.40	2.66	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
154.87	0.47	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
154.92	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
154.96	0.04	100		100% COAL, HEAVY DULL	
155.22	0.26	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
155.42	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.60	1.18	100		100% SILTSTONE	GREY, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
157.97	1.37	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
158.63	0.66	100		100% SANDSTONE,COARSE GRAINED	LITHIC, CARBONACEOUS, GREY, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
159.08	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
160.45	1.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, COALY, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
160.70	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
161.43	0.73	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, COALY, GREY, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
161.78	0.35	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, WITH SLICKENSIDES.
163.35	1.57	100		100% SANDSTONE	LITHIC, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
163.71	0.36	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
163.89	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
168.50	4.61	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
168.84	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.67	1.83	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
170.80	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK.
170.87	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
171.07	0.20	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
171.19	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
171.26	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
171.34	0.08	100		100% COAL, HEAVY DULL	
171.39	0.05	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
172.10	0.71	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK.
172.20	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, WITH SLICKENSIDES.
172.24	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.58	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, WITH SLICKENSIDES.
172.61	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.80	0.19	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.84	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.89	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
173.01	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
174.60	1.59	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.67	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
174.70	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.40	1.70	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
176.46	0.06	100		100% COAL, HEAVY DULL	
176.52	0.06	100		100% COAL, INTERBANDED DULL AND BRIGHT	
176.54	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
176.59	0.05	100		100% COAL, HEAVY DULL	
176.68	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
176.73	0.05	100		50% COAL, BRIGHT 50% MUDSTONE	CARBONACEOUS, BLACK. MODERATELY STRONG ROCK, THINLY LAMINATED.
176.77	0.04	100		80% MUDSTONE 20% COAL, BRIGHT	CARBONACEOUS. LENSES.
176.86	0.09	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT.
176.88	0.02	100		70% MUDSTONE 30% COAL, BRIGHT	CARBONACEOUS.
177.95	1.07	100		100% MUDSTONE	GREY, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
178.00	0.05	100		70% COAL, BRIGHT WITH NUMEROUS DULL BANDS 30% MUDSTONE	CARBONACEOUS, BANDS.
179.25	1.25	100		100% MUDSTONE	COALY, STREAKS, DARK GREY.
179.81	0.56	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. LIGHT GREY.
180.10	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
180.47	0.37	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY.
180.65	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
180.80	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
181.30	0.50	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
181.42	0.12	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, VERY WEAK ROCK.
182.35	0.93	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
183.06	0.71	100		100% MUDSTONE	SILTSTONE, COALY, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
183.96	0.90	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
184.01	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
184.04	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
185.20	1.16	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.89	3.69	100		100% SILTSTONE	COALY, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
188.96	0.07	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
189.54	0.58	100		100% SILTSTONE	ARENACEOUS, COALY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
189.95	0.41	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
194.00	4.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
198.72	4.72	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
199.14	0.42	100		100% SANDSTONE,FINE GRAINED	PEBBLY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
202.66	3.52	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
203.42	0.76	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
204.93	1.51	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.34	0.41	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
205.56	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.74	0.18	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
205.85	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
205.91	0.06	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
205.95	0.04	100	1	100% CLAY	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK.
206.15	0.20	100	1	100% COAL, HEAVY DULL	
206.22	0.07	100	1	100% MUDSTONE	ARENACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
206.26	0.04	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
206.29	0.03	100	1	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
206.36	0.07	100	1	100% MUDSTONE	ARENACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
206.39	0.03	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
206.55	0.16	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.59	0.04	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
206.64	0.05	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
206.75	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
206.97	0.22	100	1	100% COAL, HEAVY DULL	
207.07	0.10	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
207.11	0.04	100	1	100% COAL, DULL	
207.25	0.14	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, LAMINAE.
207.44	0.19	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
207.64	0.20	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
209.00	1.36	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
209.77	0.77	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
209.95	0.18	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
211.60	1.65	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
211.80	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
212.30	0.50	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
214.73	2.43	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
215.90	1.17	100		50% SANDSTONE 50% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
217.78	1.88	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
217.88	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
218.90	1.02	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
223.54	4.64	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
224.17	0.63	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, STRONG ROCK.
224.32	0.15	100		100% SANDSTONE	COALY, LENSES, GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
225.34	1.02	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, STRONG ROCK.
225.54	0.20	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, LITHIC, GREY. LENSES. UNWEATHERED, MODERATELY STRONG ROCK.
226.05	0.51	100		100% SANDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
229.50	3.45	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
230.36	0.86	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
233.39	3.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
233.85	0.46	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
234.28	0.43	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
235.12	0.84	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
236.17	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
237.70	1.53	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
240.10	2.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
240.48	0.38	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
242.00	1.52	100		100% SANDSTONE	LITHIC, MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
243.60	1.60	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
245.93	2.33	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
246.11	0.18	100		100% CARBONACEOUS SHALE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
246.23	0.12	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
246.58	0.35	100		60% CARBONACEOUS SHALE 40% MUDSTONE	BLACK. CARBONACEOUS, BANDS, BLACK.
246.61	0.03	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
246.67	0.06	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
246.72	0.05	100		100% COAL, HEAVY DULL	
246.85	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
247.79	0.94	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN. SILTSTONE, BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
247.84	0.05	100		100% CLAYSTONE	BUFF, UNWEATHERED, VERY WEAK ROCK.
248.45	0.61	100		60% CARBONACEOUS SHALE 40% MUDSTONE	COALY, BLACK. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
248.52	0.07	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, BUFF, UNWEATHERED, WEAK ROCK.
249.06	0.54	100		70% CARBONACEOUS SHALE 30% MUDSTONE	COALY, BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
249.36	0.30	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
249.50	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
249.55	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
249.63	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
249.76	0.13	100		100% COAL, HEAVY DULL	
249.88	0.12	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
250.01	0.13	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
250.13	0.12	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
250.18	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
250.40	0.22	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
250.83	0.43	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
251.18	0.35	100		100% CLAYSTONE	CARBONACEOUS, BANDS, BUFF, UNWEATHERED, WEAK ROCK.
251.30	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
251.39	0.09	100		100% CLAYSTONE	BUFF, UNWEATHERED, WEAK ROCK.
251.85	0.46	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
252.13	0.28	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
252.37	0.24	100		100% CLAYSTONE	BUFF, UNWEATHERED, VERY WEAK ROCK.
252.54	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
252.60	0.06	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
252.73	0.13	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
253.00	0.27	100		100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
253.50	0.50	100		60% SILTSTONE 40% MUDSTONE	CARBONACEOUS, LIGHT GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : 336.50 M R.L.	
253.52	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
253.60	0.03	100	2	100% COAL, HEAVY DULL	
253.63	0.03	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
253.66	0.03	100	2	100% COAL, HEAVY DULL	
253.80	0.14	100	2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
253.97	0.17	100	2	100% COAL, INTERBANDED DULL AND BRIGHT	
254.00	0.03	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
254.12	0.12	100	2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
254.28	0.16	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	SANDSTONE, LENSES, WITH CALCITE ON CLEAT.
254.34	0.06	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
254.35	0.01	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
254.37	0.02	100	2	100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
254.60	0.23	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
				BASE OF DALMAYNE B : THICKNESS= 1.10 M; SAMPLED THICKNESS= 1.08 M	
254.69	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
254.74	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
254.81	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
254.86	0.05	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
255.01	0.15	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
258.10	3.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
262.02	3.92	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY BEDDED, WITH MUD PELLETS.
262.05	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
272.34	10.29	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY BEDDED, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
272.37	0.03	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
272.76	0.39	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
272.92	0.16	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
278.92	6.00	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
278.94	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
279.36	0.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
280.73	1.37	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
		TOP OF	DALMAYNE C : 309.27 M R.L.		
280.76	0.03	100	3	100% COAL, HEAVY DULL	
280.80	0.04	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
280.97	0.17	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.00	0.03	100	3	100% SANDSTONE	CARBONACEOUS, GREY.
281.04	0.04	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
281.09	0.05	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
281.10	0.01	100	3	100% COAL, BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
281.25	0.15	100	3	100% COAL, HEAVY DULL	
281.27	0.02	100	3	100% COAL, DULL	
281.35	0.08	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
281.40	0.05	100	3	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
281.44	0.04	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.47	0.03	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
281.51	0.04	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
281.57	0.06	100	3	100% COAL, DULL	
281.76	0.19	100	3	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE C : THICKNESS= 1.03 M; SAMPLED THICKNESS= 1.03 M	
282.39	0.63	100		70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, DARK BROWN. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
283.31	0.92	100		85% SILTSTONE 15% SANDSTONE	CARBONACEOUS, LENSES, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
283.80	0.49	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
284.12	0.32	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
284.37	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
293.44	9.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
293.60	0.16	100		100% SILTSTONE	MUDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
293.62	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
293.82	0.20	100		100% SILTSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
294.41	0.59	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
294.47	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
296.00	1.53	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
297.56	1.56	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
298.12	0.56	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
298.85	0.73	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
301.03	2.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
301.33	0.30	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
301.93	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
302.14	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
302.74	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
303.62	0.88	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
304.20	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
305.51	1.31	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
305.60	0.09	100		100% CLAYSTONE	BUFF, UNWEATHERED, MODERATELY WEAK ROCK.
305.91	0.31	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
306.12	0.21	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
309.80	3.68	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
313.83	4.03	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.

TOP OF : 276.17 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
313.86	0.03	100	4	100% CLAYSTONE	SHALY, BROWN, SOFT.
313.93	0.07	100	4	100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.
313.97	0.04	100	4	100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
314.00	0.03	100	4	100% COAL, HEAVY DULL	BLACK, MODERATELY WEAK ROCK.
314.09	0.09	100	4	100% COAL, HEAVY DULL	
314.16	0.07	100	4	100% COAL, DULL	
314.19	0.03	100	4	100% COAL, HEAVY DULL	
314.21	0.02	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.26	0.05	100	4	100% MUDSTONE	SHALY, BROWN, FIRM.
314.32	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
314.40	0.08	100	5	100% COAL, HEAVY DULL	
314.43	0.03	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
314.46	0.03	100	5	100% COAL, DULL	
314.47	0.01	100	5	100% MUDSTONE	BROWN, SOFT.
314.60	0.13	100	5	100% COAL, DULL	
314.61	0.01	100	5	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
314.66	0.05	100	5	100% COAL, DULL	
314.68	0.02	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.69	0.01	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
314.83	0.14	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
314.84	0.01	100	5	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
314.87	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
314.89	0.02	100	5	100% COAL, HEAVY DULL	
314.96	0.07	100	5	100% COAL, DULL	
315.19	0.23	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
315.22	0.03	100	5	100% COAL, HEAVY DULL	
315.26	0.04	100	5	100% COAL, DULL	
315.31	0.05	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
315.38	0.07	100	5	100% COAL, DULL	
315.42	0.04	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
315.43	0.01	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
315.44	0.01	100	5	60% COAL, BRIGHT 40% SHALE	LIGHT BROWN. LAMINATED.
315.52	0.08	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
315.56	0.04	100	5	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
315.71	0.15	100	6	100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
315.83	0.12	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
315.84	0.01	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
315.86	0.02	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	
316.25	0.39	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
316.28	0.03	100	6	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
316.43	0.15	100	6	100% COAL, HEAVY DULL	
	BASE OF : THICKNESS= 2.60 M; SAMPLED THICKNESS= 2.60 M				
316.44	0.01	100	7	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
316.46	0.02	100	7	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
316.62	0.16	100	7	100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.
317.80	1.18	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
320.91	3.11	100		60% SILTSTONE 40% SANDSTONE	CALCAREOUS, GREY. MED.-FINE GRAINED, LITHIC, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
321.76	0.85	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
323.08	1.32	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
330.32	7.24	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
331.88	1.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
332.00	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
333.60	1.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
333.65	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
333.87	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
334.00	0.13	100		100% CARBONACEOUS SHALE	
		TOP OF DALMAYNE D UPPER : 256.00 M R.L.			
335.00	1.00	0		CORE LOSS	
		BASE OF DALMAYNE D UPPER : THICKNESS= 1.00 M; SAMPLED THICKNESS= 0.00 M			
335.65	0.65	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
336.23	0.58	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
338.35	2.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
343.97	5.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
344.12	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
347.54	3.42	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
347.63	0.09	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
347.75	0.12	100		100% SILTSTONE	STRONGLY FRAGMENTED, GREY, UNWEATHERED, WEAK ROCK.
352.31	4.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
352.49	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
352.64	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
352.84	0.20	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
		TOP OF DALMAYNE D LOWER : 237.16 M R.L.			
352.92	0.08	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
352.93	0.01	100		100% COAL, DULL	
353.00	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
353.03	0.03	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF DALMAYNE D LOWER : THICKNESS= 0.19 M; SAMPLED THICKNESS= 0.00 M	
353.05	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
353.08	0.03	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, WEAK ROCK.
353.11	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
353.13	0.02	100		100% COAL, HEAVY DULL	
353.14	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
353.22	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
353.48	0.26	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
355.52	2.04	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
356.14	0.62	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
356.19	0.05	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK.
358.59	2.40	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
358.75	0.16	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
359.67	0.92	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
361.00	1.33	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
362.00	1.00	0		CORE LOSS	
362.29	0.29	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
362.86	0.57	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS.
363.43	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
365.22	1.79	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
368.32	3.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
368.43	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
368.47	0.04	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
368.70	0.23	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
371.50	2.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
372.40	0.90	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
377.04	4.64	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
377.55	0.51	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WITH PLANT REMAINS.
380.15	2.60	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
381.98	1.83	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
390.31	8.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
390.38	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK.
390.39	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
390.42	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
390.49	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
390.58	0.09	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
390.60	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
390.80	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
390.92	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
390.96	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
391.10	0.14	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
391.23	0.13	100		100% MUDSTONE	COALY, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
391.25	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
391.41	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
391.44	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
392.00	0.56	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
392.57	0.57	100		80% SILTSTONE 20% SANDSTONE	CARBONACEOUS, BANDS, DARK GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
393.06	0.49	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
394.38	1.32	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
395.00	0.62	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
395.07	0.07	100		100% CARBONACEOUS SHALE	DARK GREY, UNWEATHERED, WEAK ROCK.
395.18	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
395.21	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
395.32	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
395.62	0.30	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CROSS LAMINATION.
396.06	0.44	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
396.67	0.61	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
397.95	1.28	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
398.58	0.63	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
399.68	1.10	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
400.24	0.56	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
401.00	0.76	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
401.13	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
401.34	0.21	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
401.67	0.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, LAMINATED.
402.50	0.83	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
403.52	1.02	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
404.14	0.62	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
404.56	0.42	100		100% SANDSTONE,FINE GRAINED	FRIABLE, GREY, WEAKLY CEMENTED.
404.80	0.24	100		100% MUDSTONE	FISSILE, GREY, STIFF, LAMINATED.
407.59	2.79	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
407.61	0.02	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
407.94	0.33	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, MODERATELY WEAK ROCK.
407.99	0.05	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, VERY WEAK ROCK.
408.07	0.08	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E2 : 181.93 M R.L.	
408.21	0.14	100		100% COAL, HEAVY DULL	
408.44	0.23	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
408.57	0.13	100		100% COAL, DULL	
408.72	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE E2 : THICKNESS= 0.65 M; SAMPLED THICKNESS= 0.00 M	
410.11	1.39	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
410.84	0.73	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
410.87	0.03	100		100% COAL, BRIGHT	
411.10	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
416.55	5.45	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
416.77	0.22	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, BANDS.
416.82	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, LAMINATED.
417.43	0.61	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED.
418.00	0.57	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	1.08 M	253.50 - 254.60 M	1.10 M
DC	1.03 M	280.73 - 281.76 M	1.03 M
DC1	2.60 M	313.83 - 316.43 M	2.60 M
DDU	0.00 M	334.00 - 335.00 M	1.00 M
DDL	0.00 M	352.84 - 353.03 M	0.19 M
DE2	0.00 M	408.07 - 408.72 M	0.65 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	205.74 - 207.25 M	1.51 M
2	253.52 - 254.60 M	1.08 M
3	280.73 - 281.76 M	1.03 M
4	313.83 - 314.32 M	0.49 M
5	314.32 - 315.56 M	1.24 M
6	315.56 - 316.43 M	0.87 M
7	316.43 - 316.62 M	0.19 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 8

HOLE TYPE	CORE
EASTING	601,700 M AM GRID
NORTHING	5,360,400 M AM GRID
ELEVATION	300.00 M
TOTAL DEPTH DRILLED	265.50 M
DRILLING STARTED	11/ 9/78
DRILLING TIME	9 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
51.40	51.40			100% DOLERITE	SCREE.
53.40	2.00	100		100% SHALE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.52	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.60	0.08	100		100% CARBONACEOUS SHALE	COALY, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
53.98	0.38	100		100% SHALE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
54.92	0.94	100		100% SHALE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
57.14	2.22	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
57.37	0.23	100		100% SILTSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
57.55	0.18	100		100% SHALE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
57.56	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
57.57	0.01	100		100% MUDSTONE	CARBONACEOUS, BLACK.
57.68	0.11	100		100% COAL, HEAVY DULL	
57.85	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
58.26	0.41	100		100% SILTSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
58.32	0.06	100		100% CLAYSTONE	BROWN, UNWEATHERED, WEAK ROCK.
58.41	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
58.48	0.07	100		100% CLAYSTONE	FISSILE, BROWN, UNWEATHERED, WEAK ROCK.
58.60	0.12	100		100% CARBONACEOUS SHALE	COALY, DARK GREY, UNWEATHERED, WEAK ROCK.
58.80	0.20	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
65.84	7.04	100		100% SILTSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.15	2.31	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
68.33	0.18	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.12	3.79	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
72.16	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
75.96	3.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
76.19	0.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
76.26	0.07	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH TROUGH CROSS BEDDING.
76.76	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
76.85	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
77.32	0.47	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
77.48	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
77.68	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
82.50	4.82	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
82.54	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
82.60	0.06	100		100% MUDSTONE	FISSILE, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
82.61	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
82.68	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
82.82	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
82.84	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
82.87	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK.
82.94	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
83.14	0.20	100		100% SILTSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.19	0.05	100		100% CLAYSTONE	COALY, BUFF, VERY WEAK ROCK.
83.27	0.08	100		100% MUDSTONE	COALY, BANDS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
83.52	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.35	0.83	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
84.53	0.18	100		100% MUDSTONE	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
84.76	0.23	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
85.74	0.98	100		100% MUDSTONE	FISSILE, BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
85.94	0.20	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
86.93	0.99	20		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY.
87.09	0.16	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
87.49	0.40	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
87.64	0.15	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
87.69	0.05	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, WEAK ROCK.
87.95	0.26	100		100% MUDSTONE	CARBONACEOUS, BLACK.
88.38	0.43	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
88.55	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
89.00	0.45	0		CORE LOSS	
89.15	0.15	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK.
89.24	0.09	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.39	0.15	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
89.63	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.74	0.11	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.86	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.00	0.14	0		CORE LOSS	
90.45	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED.
90.65	0.20	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
91.15	0.50	100		100% MUDSTONE	CARBONACEOUS, BLACK.
91.30	0.15	100		100% CLAYSTONE	FISSILE, BUFF, UNWEATHERED, VERY WEAK ROCK.
91.86	0.56	100		100% MUDSTONE	CARBONACEOUS, BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
92.02	0.16	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
94.20	2.18	100		100% SILTSTONE	FISSILE, BANDS, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
94.68	0.48	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
94.75	0.07	100		100% SHALE	BADLY BROKEN, GREY.
94.93	0.18	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
95.49	0.56	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
98.44	2.95	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	COALY, LENSES, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
103.36	4.92	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
104.05	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
105.70	1.65	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
105.84	0.14	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
105.85	0.01	100		100% CLAYSTONE	BUFF, SOFT.
105.87	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.93	0.06	100		100% COAL, HEAVY DULL	
106.02	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
106.14	0.12	100		100% COAL, INTERBANDED DULL AND BRIGHT	MUDSTONE, LAMINAE, WITH CALCITE ON CLEAT.
106.17	0.03	100		100% MUDSTONE	SHALY, CARBONACEOUS, GREY-BROWN, WEAK ROCK.
106.31	0.14	100		100% MUDSTONE	GREY, WEAK ROCK.
106.35	0.04	100		100% SHALE	GREY, FIRM.
106.36	0.01	100		100% SHALE	LIGHT BROWN, FIRM.
106.50	0.14	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
106.70	0.20	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
109.20	2.50	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.25	0.05	100		100% CLAYSTONE	LIGHT BROWN, SOFT.
109.31	0.06	100		100% CLAYSTONE	FISSILE, BROWN, SOFT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
109.37	0.06	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, SOFT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
109.49	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
109.51	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
109.56	0.05	100		100% CLAYSTONE	BROWN, SOFT.
109.60	0.04	100		100% MUDSTONE	BROWN, WEAK ROCK.
109.98	0.38	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BLACK. SILTSTONE, BROWN. MODERATELY WEAK ROCK, THINLY BEDDED.
110.14	0.16	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
110.19	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
110.39	0.20	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
110.65	0.26	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY-BROWN.
112.20	1.55	100		100% SANDSTONE,FINE GRAINED	GREY, VERY THINLY BEDDED, WITH LOAD CASTS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
114.85	2.65	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
115.83	0.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
117.85	2.02	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
118.40	0.55	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
121.60	3.20	100		100% SANDSTONE,COARSE GRAINED	FRIABLE, LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
122.20	0.60	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
122.85	0.65	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WEAK ROCK.
123.06	0.21	100		100% MUDSTONE	GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
126.00	2.94	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.45	2.45	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.20	1.75	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.34	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
130.55	0.21	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
130.74	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
133.38	2.64	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FISSILE, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
134.00	0.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
137.00	3.00	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
137.35	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
137.70	0.35	100		100% CLAYSTONE	BADLY BROKEN, GREY, MODERATELY STRONG ROCK.
143.30	5.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
144.05	0.75	100		100% SILTSTONE	FRIABLE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
144.50	0.45	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
144.83	0.33	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
145.55	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
147.20	1.65	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FISSILE, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.70	2.50	100		100% SANDSTONE,MEDIUM GRAINED	FRIABLE, LITHIC, LIGHT GREY, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
150.05	0.35			100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
150.45	0.40			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
150.65	0.20			100% MUDSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK.
150.90	0.25		1	100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, VERY WEAK ROCK.
152.04	1.14		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.14	0.10		1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
152.32	0.18		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.42	0.10		1	100% MUDSTONE	SILTSTONE, COALY, DARK BROWN, VERY WEAK ROCK.
152.62	0.20		1	100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
152.73	0.11		1	100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
152.75	0.02		1	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
152.85	0.10		1	100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
153.04	0.19			100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
153.17	0.13			100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK.
153.40	0.23			100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
156.68	3.28			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
157.84	1.16			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
158.43	0.59			70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
161.64	3.21			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
162.12	0.48			100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
162.48	0.36			100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
162.53	0.05			100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
162.71	0.18			100% MUDSTONE	CARBONACEOUS, FRIABLE, BLACK, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
162.80	0.09			100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
162.87	0.07			100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
163.24	0.37			100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
163.66	0.42			100% MUDSTONE	CARBONACEOUS, FRIABLE, BLACK, VERY WEAK ROCK.
164.44	0.78	100		100% SHALE	GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
165.55	1.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK.
170.03	4.48	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
170.92	0.89	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
175.90	4.98	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS.
176.03	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
176.11	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.18	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
176.19	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
176.21	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK.
176.27	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
176.43	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
177.58	1.15	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, THICKLY LAMINATED, WITH PLANT REMAINS.
177.80	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
178.36	0.56	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
179.00	0.64	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
179.48	0.48	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, THICKLY LAMINATED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
181.81	2.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
181.83	0.02	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
181.96	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
182.18	0.22	100		100% SILTSTONE	CARBONACEOUS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
182.40	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
183.52	1.12	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
187.50	3.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
188.37	0.87	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
188.68	0.31	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.37	2.69	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.51	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
191.84	0.33	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
192.32	0.48	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
193.18	0.86	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
196.06	2.88	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
196.31	0.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
196.45	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
198.10	1.65	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
198.83	0.73	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
199.52	0.69	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
200.05	0.53	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
208.45	8.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
209.75	1.30	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK.
209.87	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
210.71	0.84	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
211.20	0.49	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
211.55	0.35	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.00	0.45	100		100% MUDSTONE	SILTSTONE, FRIABLE, DARK GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
212.20	0.20	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
212.43	0.23	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
213.15	0.72	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
213.56	0.41	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
214.02	0.46	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
214.44	0.42	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, WEAK ROCK.
214.91	0.47	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
214.98	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
215.35	0.37	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
215.51	0.16	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, WEAK ROCK.
215.75	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
216.02	0.27	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
216.16	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, WITH PLANT REMAINS.
217.23	1.07	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
217.53	0.30	100		100% SHALE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
218.54	1.01	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
219.67	1.13	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
222.07	2.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
222.69	0.62	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
223.20	0.51	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
223.46	0.26	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
223.88	0.42	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
224.02	0.14	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
224.30	0.28	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
224.96	0.66	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
225.17	0.21	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
225.28	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
225.51	0.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
226.88	1.37	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
227.18	0.30	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
227.86	0.68	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
228.40	0.54	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
228.51	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
228.72	0.21	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
228.92	0.20	100		100% SILTSTONE	FISSILE, BADLY BROKEN, GREY, VERY WEAK ROCK.
229.27	0.35	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
230.78	1.51	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
230.80	0.02	100		100% COAL, HEAVY DULL	WITH PYRITE ON CLEAT.
230.86	0.06	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
231.36	0.50	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK.
231.65	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
231.72	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
232.07	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING.
232.09	0.02	100		100% COAL, DULL	
232.18	0.09	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
233.50	1.32	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, GREY, WITH MICA, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
234.25	0.75	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
234.45	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
235.23	0.78	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, MODERATELY WEAK ROCK.
235.65	0.42	100		100% SANDSTONE,COARSE GRAINED	FISSILE, LIGHT GREY, WEAK ROCK.
237.00	1.35	100		100% SANDSTONE	MED.-COARSE GRAINED, QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
237.88	0.88	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, WITH FRAGMENTS OF FELDSPAR, WEAK ROCK, WITH MUD PELLETS.
239.56	1.68	100		100% SANDSTONE	MED.-COARSE GRAINED, QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
246.76	7.20	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
247.40	0.64	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
254.70	7.30	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
257.44	2.74	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
257.70	0.26	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY WEAK ROCK.
260.54	2.84	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
260.67	0.13	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
260.85	0.18	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.05	0.20	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.65	0.60	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
261.75	0.10	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.22	0.47	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.31	0.09	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.56	0.25	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
262.64	0.08	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, WITH FRAGMENTS OF FELDSPAR, MODERATELY STRONG ROCK.
264.33	1.69	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.
265.50	1.17	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREY, MODERATELY STRONG ROCK.

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	150.65 - 152.85 M	2.20 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 9

HOLE TYPE	CORE	
EASTING	595,800 M	GRID
NORTHING	5,383,100 M	GRID
ELEVATION	530.00 M	
TOTAL DEPTH DRILLED	426.20 M	
DRILLING STARTED	17/ 9/78	
DRILLING TIME	17 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
10.00	10.00	100		100% DOLERITE	BADLY BROKEN, RED-GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
26.00	16.00	100		100% DOLERITE	ARGILLACEOUS, YELLOW-BROWN, COMPLETELY WEATHERED, WEAK ROCK.
32.80	6.80	100		100% DOLERITE	BADLY BROKEN, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
33.06	0.26	100		100% CLAY	ORANGE-YELLOW, SLIGHTLY WEATHERED, VERY WEAK ROCK.
33.21	0.15	100		100% CLAYSTONE	FRIABLE, GREY, UNWEATHERED, WEAK ROCK.
34.64	1.43	100		100% CLAYSTONE	YELLOW-BROWN, SLIGHTLY WEATHERED, WEAK ROCK.
35.62	0.98	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
36.45	0.83	100		100% CLAYSTONE	SHALY, VARIAGATED COLOUR, SLIGHTLY WEATHERED, VERY WEAK ROCK.
36.60	0.15	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.
38.10	1.50	100		100% CLAYSTONE	FRIABLE, SHALY, VARIAGATED COLOUR, UNWEATHERED, VERY WEAK ROCK.
38.63	0.53	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
39.08	0.45	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED.
39.45	0.37	100		100% SILTSTONE	CARBONACEOUS, SHALY, DARK GREY, UNWEATHERED, VERY WEAK ROCK.
39.56	0.11	100		100% PEBBLE CONGLOMERATE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
40.74	1.18	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, THICKLY LAMINATED.
43.57	2.83	100		100% SILTSTONE	SHALY, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
45.88	2.31	100		100% SILTSTONE	ARENACEOUS, GREY-GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
47.00	1.12	100		100% MUDSTONE	SHALY, FRIABLE, GREY, VERY WEAK ROCK.
47.17	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
48.87	1.70	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.23	0.36	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. GREY. WEAK ROCK, THICKLY LAMINATED. MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
50.30	1.07	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
50.87	0.57	100		100% SILTSTONE	COALY, STREAKS, GREY, VERY WEAK ROCK.
51.85	0.98	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. LIGHT GREY. WEAK ROCK.
56.90	5.05	100		100% CLAYSTONE	ARENACEOUS, BANDS, VARIAGATED COLOUR, VERY WEAK ROCK.
57.11	0.21	100		100% CLAYSTONE	PEBBLY, BUFF, VERY WEAK ROCK.
58.20	1.09	100		100% CLAYSTONE	SHALY, BANDS, YELLOW-GREY, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.85	1.65	100		100% CLAYSTONE	SILTSTONE, BANDS, VARIAGATED COLOUR, WEAK ROCK.
60.13	0.28	100		100% SANDSTONE,COARSE GRAINED	ARGILLACEOUS, GLAUCONITIC, GREEN, WEAK ROCK.
67.60	7.47	100		100% CLAYSTONE	ARENACEOUS, BANDS, BROWN, VERY WEAK ROCK.
70.60	3.00	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, VERY WEAK ROCK.
71.05	0.45	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
71.45	0.40	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
71.60	0.15	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, BUFF, VERY WEAK ROCK.
71.95	0.35	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
72.73	0.78	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
74.00	1.27	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
75.27	1.27	100		100% MUDSTONE	SILTSTONE, DARK BROWN, WEAK ROCK.
75.60	0.33	100		100% SILTSTONE	SHALY, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
77.50	1.90	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.87	1.37	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
79.60	0.73	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
82.40	2.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
83.02	0.62	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
83.47	0.45	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
83.56	0.09	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
83.65	0.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, SILTSTONE, GREY, MODERATELY WEAK ROCK.
84.30	0.65	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
84.65	0.35	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
85.00	0.35	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
85.47	0.47	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
86.54	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
87.00	0.46	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
87.25	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
87.51	0.26	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
87.72	0.21	100		100% CARBONACEOUS SHALE	DARK GREY, VERY WEAK ROCK.
88.65	0.93	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
88.80	0.15	100		100% SHALE	DARK BROWN, WEAK ROCK.
89.38	0.58	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, WEAK ROCK.
89.58	0.20	100		100% MUDSTONE	SHALY, BROWN, WEAK ROCK.
89.89	0.31	100		100% SHALE	GREY, VERY WEAK ROCK.
90.75	0.86	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
92.23	1.48	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
92.71	0.48	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY, WEAK ROCK.
94.22	1.51	100		80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN. GREY. WEAK ROCK.
94.25	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
94.35	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
95.28	0.93	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
96.02	0.74	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH TROUGH CROSS BEDDING.
98.60	2.58	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
98.66	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
98.75	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
99.23	0.48	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
99.58	0.35	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
101.89	2.31	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
102.23	0.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
102.40	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, WITH MUD PELLETS.
102.61	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
104.73	2.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
105.07	0.34	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
105.44	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
106.36	0.92	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
106.49	0.13	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
106.67	0.18	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
107.90	1.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
108.04	0.14	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
108.76	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
109.20	0.44	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
109.37	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
109.89	0.52	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
110.16	0.27	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
110.61	0.45	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.84	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
110.89	0.05	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
110.91	0.02	100		100% COAL, DULL	BADLY BROKEN.
113.77	2.86	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
114.43	0.66	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
116.44	2.01	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, COALY, LIGHT GREY, MODERATELY WEAK ROCK.
117.50	1.06	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
118.20	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, WEAK ROCK.
119.68	1.48	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
119.86	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
120.71	0.85	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
121.08	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
121.33	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
123.17	1.84	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
123.43	0.26	100		100% CLAYSTONE	LIGHT GREY, VERY WEAK ROCK.
123.87	0.44	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
124.46	0.59	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
125.24	0.78	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
126.22	0.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
128.47	2.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
130.22	1.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH CROSS LAMINATION.
130.94	0.72	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
131.18	0.24	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
131.44	0.26	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.80	0.36	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS.
132.17	0.16	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
132.33	0.16	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
133.15	0.82	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
133.25	0.10	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK GREY, VERY WEAK ROCK.
140.20	6.95	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
141.00	0.80	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
141.43	0.43	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, GREY, MODERATELY WEAK ROCK.
148.42	6.99	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
150.80	2.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
151.81	1.01	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
151.83	0.02	100		100% COAL, BRIGHT	
152.05	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
152.16	0.11	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
153.78	1.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
154.42	0.64	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, WEAK ROCK.
154.44	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN.
154.47	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
154.49	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
154.68	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
154.72	0.04	100		100% COAL, DULL	
154.77	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
156.23	1.46	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.48	0.25	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
156.92	0.44	100		100% SILTSTONE	GREY, WEAK ROCK.
158.03	1.11	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.25	0.22	100		85% SILTSTONE 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY. LIGHT GREY. WEAK ROCK.
158.46	0.21	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, BANDS, GREY. WEAK ROCK.
159.21	0.75	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
159.59	0.38	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
159.70	0.11	100		100% SILTSTONE	ARGILLACEOUS, BUFF, WEAK ROCK.
159.89	0.19	100		100% SILTSTONE	LIGHT BROWN, VERY WEAK ROCK.
160.35	0.46	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
161.03	0.68	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, GREY, WEAK ROCK.
161.21	0.18	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
162.32	1.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
162.38	0.06	100		100% CLAYSTONE	FISSILE, FRAGMENTED, BUFF, VERY WEAK ROCK.
162.44	0.06	100		100% MUDSTONE	CARBONACEOUS, SHALY, BLACK, VERY WEAK ROCK.
162.51	0.07	100		100% CLAY	BUFF, VERY SOFT.
162.57	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, SOFT.
163.48	0.91	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
165.51	2.03	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
165.78	0.27	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
166.06	0.28	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
166.48	0.42	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
167.05	0.57	100		100% CLAYSTONE	FISSILE, PEBBLY, LIGHT BROWN, VERY WEAK ROCK.
171.82	4.77	100		100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.02	0.20	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
172.07	0.05	100		100% COAL, HEAVY DULL	
172.13	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
172.17	0.04	100		100% COAL, HEAVY DULL	
172.23	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
172.46	0.23	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
172.74	0.28	100		100% CLAYSTONE	FISSILE, MICACEOUS, BUFF, VERY WEAK ROCK.
172.79	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
172.82	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
172.98	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
173.00	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
173.04	0.04	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK.
176.87	3.83	100		100% SILTSTONE	GREY, WEAK ROCK, WITH CROSS LAMINATION.
178.94	2.07	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
181.00	2.06	100		100% SILTSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
181.24	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
181.61	0.37	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
182.31	0.70	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
182.44	0.13	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
183.16	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
183.23	0.07	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
183.60	0.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
184.13	0.53	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
184.32	0.19	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
184.33	0.01	100		100% COAL, BRIGHT	
184.54	0.21	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
184.82	0.28	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
184.90	0.08	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
185.15	0.25	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
185.95	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : 344.05 : R.L.	
186.04	0.09			100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
186.05	0.01			100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
186.33	0.28			100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
186.46	0.13		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.47	0.01		1	100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
186.50	0.03		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.61	0.11		1	100% MUDSTONE	CARBONACEOUS, BLACK.
186.92	0.31		1	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
187.09	0.17		1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.19	0.10		1	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
187.33	0.14		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.41	0.08		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.49	0.08		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.50	0.01		2	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
187.55	0.05		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.60	0.05		2	70% MUDSTONE 30% COAL, BRIGHT	CARBONACEOUS, BROWN-BLACK. MODERATELY STRONG ROCK, LAMINATED.
187.68	0.08		2	100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
187.70	0.02		2	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
187.88	0.18		2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
187.98	0.10		2	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
187.99	0.01		3	100% COAL, BRIGHT	
188.28	0.29		3	100% COAL, HEAVY DULL	BLACK, VERY WEAK ROCK.
188.35	0.07		3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
188.42	0.07		3	100% MUDSTONE	SILTSTONE, FISSILE, LIGHT BROWN.
188.59	0.17		3	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
188.97	0.38		3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
189.07	0.10		3	100% CLAYSTONE	LIGHT BROWN, FIRM.
189.43	0.36		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.53	0.10		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
189.56	0.03		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
189.77	0.21		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.79	0.02		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
189.90	0.11		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
189.94	0.04		4	100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
190.00	0.06		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
190.07	0.07		4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
190.15	0.08	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
190.20	0.05	100	5	100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
190.23	0.03	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
190.29	0.06	100	5	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE B : THICKNESS= 4.34 M; SAMPLED THICKNESS= 3.96 M			
190.75	0.46	100		100% MUDSTONE	SHALY, GREY-BROWN, VERY WEAK ROCK.
190.85	0.10	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, VERY WEAK ROCK.
191.15	0.30	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK.
191.18	0.03	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
192.10	0.92	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
192.50	0.40	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION.
192.90	0.40	100		100% SILTSTONE	GREY, WEAK ROCK.
193.15	0.25	100		100% MUDSTONE	COALY, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
194.51	1.36	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
194.94	0.43	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
199.68	4.74	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
200.00	0.32	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
200.60	0.60	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
200.81	0.21	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
201.34	0.53	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
202.14	0.80	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	BANDS, GREY. SILTSTONE, LAMINAE, LIGHT GREY. WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
202.37	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
202.85	0.48	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
203.85	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
204.58	0.73	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
205.77	1.19	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
205.89	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
207.48	1.59	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
208.58	1.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
209.00	0.42	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
210.74	1.74	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
210.96	0.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
211.00	0.04	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
211.96	0.96	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
212.82	0.86	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
213.05	0.23	100		100% SILTSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
213.21	0.16	100		100% SILTSTONE	GREY, WEAK ROCK.
213.23	0.02	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
			TOP OF DALMAYNE C : 316.77 M R.L.		
213.48	0.25	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
213.90	0.42	100		100% MUDSTONE	CARBONACEOUS, BROWN, VERY WEAK ROCK.
213.93	0.03	100		100% CLAYSTONE	BROWN, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.09	0.16	100		100% MUDSTONE	CARBONACEOUS BROWN, VERY WEAK ROCK.
214.32	0.23	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
214.37	0.05	100		100% CARBONACEOUS SHALE	DARK GREY, VERY WEAK ROCK.
214.39	0.02	100		100% CLAYSTONE	BUFF, VERY WEAK ROCK.
214.51	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
214.68	0.17	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
214.76	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
214.86	0.10	100		100% MUDSTONE	BROWN, WEAK ROCK.
214.96	0.10	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
215.11	0.15	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
215.44	0.33	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
215.51	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
215.80	0.29	100		100% CLAYSTONE	FISSILE, BUFF, SOFT.
216.00	0.20	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
216.05	0.05	100		100% MUDSTONE	ARENACEOUS, CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
216.09	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.14	0.05	100		100% MUDSTONE	ARENACEOUS, BROWN, WEAK ROCK, SLOW SLAKING.
216.37	0.23	100		100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
216.53	0.16	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
216.65	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.67	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
216.69	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
216.71	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.05	0.34	100		100% COAL, HEAVY DULL	BLACK, MODERATELY STRONG ROCK.
217.12	0.07	100		100% CARBONACEOUS SHALE	
217.17	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
217.18	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.21	0.03	100		100% CLAYSTONE	CARBONACEOUS, BLACK, FIRM.
217.29	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.32	0.03	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
217.35	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
217.38	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
217.63	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.65	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
217.77	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
217.87	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
217.97	0.10	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
218.17	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.22	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.23	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.24	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.27	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.28	0.01	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
218.40	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.45	0.05	100		100% COAL, HEAVY DULL	
218.53	0.08	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
218.56	0.03	100		100% CARBONACEOUS SHALE	
218.63	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
218.72	0.09	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
218.80	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
			BASE OF DALMAYNE C : THICKNESS= 5.57 M; SAMPLED THICKNESS= 0.00 M		
219.09	0.29	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.19	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
219.26	0.07	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.29	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
219.60	0.31	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK.
219.69	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
219.78	0.09	100		100% MUDSTONE	BADLY BROKEN, GREY, WEAK ROCK.
219.91	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
219.96	0.05	100		100% MUDSTONE	BADLY BROKEN, GREY.
221.00	1.04	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
221.64	0.64	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
222.80	1.16	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
223.08	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
223.60	0.52	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
223.73	0.13	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
224.57	0.84	100		100% SANDSTONE	LITHIC, MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK.
226.61	2.04	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
227.80	1.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
229.13	1.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
229.27	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
229.65	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
229.78	0.13	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
230.00	0.22	0		CORE LOSS	
230.31	0.31	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LENSES, GREY, VERY WEAK ROCK.
230.38	0.07	100		100% CLAY	LIGHT BROWN, SOFT.
232.40	2.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.60	0.20	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
232.74	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
233.20	0.46	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
234.10	0.90	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
235.56	1.46	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
237.00	1.44	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
242.00	5.00	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
244.26	2.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
244.40	0.14	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
244.46	0.06	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
244.56	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
244.66	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
245.31	0.65	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
245.52	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
245.62	0.10	100		100% SILTSTONE	GREY, WEAK ROCK.
246.61	0.99	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
			TOP OF : 283.39 M R.L.		
247.17	0.56	100		100% COAL, HEAVY DULL	
			BASE OF : THICKNESS= 0.56 M; SAMPLED THICKNESS= 0.00 M		
247.27	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.
247.95	0.68	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
248.17	0.22	100		100% MUDSTONE	CARBONACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
252.30	4.13	100		100% SILTSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
252.33	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
252.38	0.05	100		100% SANDSTONE,FINE GRAINED	CARBOMACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
252.44	0.06	100		100% MUDSTONE	CARBONACEOUS, SHALY, DARK GREY, VERY WEAK ROCK.
252.63	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
252.70	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, VERY WEAK ROCK.
252.83	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
252.96	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
253.14	0.18	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
253.46	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
253.60	0.14	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
253.80	0.20	0		CORE LOSS	
255.01	1.21	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
255.31	0.30	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
256.19	0.88	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.21	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
256.81	0.60	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
257.02	0.21	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
257.51	0.49	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
257.86	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
258.02	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
258.78	0.76	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
260.60	1.82	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
261.23	0.63	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
261.46	0.23	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, THICKLY LAMINATED.
262.11	0.65	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK.
265.28	3.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
265.31	0.03	100		100% SILTSTONE	COALY, LENSES, LIGHT GREY, WEAK ROCK.
265.34	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
265.41	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
265.80	0.39	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
266.90	1.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
267.00	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
268.02	1.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE D UPPER : 261.98 M R.L.		
268.03	0.01	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
268.06	0.03	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
268.34	0.28	100	6	100% COAL, HEAVY DULL	
268.38	0.04	100	6	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
268.72	0.34	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
269.14	0.42	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	
269.15	0.01	100	6	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
269.41	0.26	100	6	100% COAL, DULL	
		BASE OF DALMAYNE D UPPER : THICKNESS= 1.39 M; SAMPLED THICKNESS= 1.39 M			
269.63	0.22	100	7	100% MUDSTONE	SHALY, DARK BROWN, MODERATELY WEAK ROCK.
269.68	0.05	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	
269.79	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
269.82	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
269.87	0.05	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
270.80	0.93	100		100% MUDSTONE	SHALY, GREY-BROWN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
270.89	0.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
271.21	0.32	100		100% SILTSTONE	GREY-GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
272.00	0.79	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
272.40	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
274.48	2.08	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
275.88	1.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
276.29	0.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
277.57	1.28	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
278.04	0.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
281.42	3.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
281.92	0.50	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
281.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
282.16	0.21	100		100% MUDSTONE	CARBONACEOUS, BLACK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
282.22	0.06	100		100% SILTSTONE	GREY, WEAK ROCK.
282.25	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
282.93	0.68	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
283.38	0.45	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
283.50	0.12	100		100% MUDSTONE	BADLY BROKEN, GREY.
		TOP OF	DALMAYNE D LOWER : 246.50 M R.L.		
283.67	0.17	0	8	CORE LOSS	
283.75	0.08	100	8	100% COAL, HEAVY DULL	
283.78	0.03	100	8	100% COAL, HEAVY DULL	
283.84	0.06	100	8	100% COAL, HEAVY DULL	WITH MUD PELLETS.
283.87	0.03	100	8	100% COAL, HEAVY DULL	BADLY BROKEN.
283.88	0.01	100	8	100% MUDSTONE	CARBONACEOUS, BLACK.
284.23	0.35	100	8	100% COAL, HEAVY DULL	
284.25	0.02	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
284.43	0.18	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
284.51	0.08	100	8	100% COAL, HEAVY DULL	
		BASE OF	DALMAYNE D LOWER : THICKNESS= 1.01 M; SAMPLED THICKNESS= 1.01 M		
285.39	0.88	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, VERY WEAK ROCK.
285.73	0.34	100		100% SILTSTONE	GREY, WEAK ROCK.
286.80	1.07	100		100% SANDSTONE,FINE GRAINED	FRIABLE, BANDS, LIGHT GREY, WITH MICA, VERY WEAK ROCK.
287.45	0.65	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
287.76	0.31	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, WEAK ROCK.
288.65	0.89	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH MICA, WEAK ROCK.
291.83	3.18	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
293.60	1.77	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.30	1.70	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
297.70	2.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
298.68	0.98	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
299.62	0.94	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
300.77	1.15	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
301.10	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
301.16	0.06	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
305.54	4.38	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
306.08	0.54	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
308.10	2.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
308.33	0.23	100		100% SILTSTONE	GREY, WEAK ROCK.
308.34	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH PYRITE.
309.17	0.83	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
309.81	0.64	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
310.78	0.97	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
310.80	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
311.00	0.20	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
311.31	0.31	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, WEAK ROCK.
311.96	0.65	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
313.03	1.07	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, GREY, WEAK ROCK.
313.67	0.64	100		100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY, WITH CALCITE, MODERATELY WEAK ROCK, .
316.02	2.35	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
316.29	0.27	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
317.03	0.74	60		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
319.40	2.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.84	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MICACEOUS, CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
319.88	0.04	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
320.75	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
321.12	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
324.60	3.48	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
326.00	1.40	100		100% SANDSTONE,MEDIUM GRAINED	FRIABLE, BANDS, LIGHT GREY, WEAK ROCK.
326.53	0.53	100		100% SILTSTONE	GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
326.55	0.02	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
327.32	0.77	100		100% SILTSTONE	GREY, WEAK ROCK.
327.40	0.08	100		100% MUDSTONE	GREY, VERY WEAK ROCK.
327.45	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.46	0.01	100		100% COAL, HEAVY DULL	
327.54	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.90	0.36	25		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK.
327.92	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
327.94	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
328.04	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK.
328.24	0.20	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES, BLACK, VERY WEAK ROCK.
328.25	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
328.26	0.01	100		100% CARBONACEOUS SHALE	COALY, BLACK, VERY WEAK ROCK.
329.21	0.95	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, WEAK ROCK.
329.31	0.10	100		100% SANDSTONE	SILTSTONE, PEBBLY, GREY, WEAK ROCK.
331.39	2.08	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
332.34	0.95	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
332.62	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WITH MICA, WEAK ROCK.
333.53	0.91	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
333.68	0.15	100		100% SHALE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
333.74	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
333.85	0.11	100		100% SILTSTONE	BADLY BROKEN, GREY.
335.00	1.15	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, WEAK ROCK.
336.26	1.26	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
336.37	0.11	0	9	CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
336.53	0.16	100	9	100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
336.55	0.02	100	9	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
336.56	0.01	100	9	100% COAL, HEAVY DULL	
336.61	0.05	100	9	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E2 : 193.39 M R.L.	
336.70	0.09	100	10	100% COAL, HEAVY DULL	
336.81	0.11	100	10	100% COAL, DULL	
336.82	0.01	100	10	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
336.99	0.17	100	10	100% COAL, DULL	
337.01	0.02	100	10	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
337.44	0.43	100	10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	HEAVY DULL COAL, LAMINAE.
337.53	0.09	100	10	100% COAL, DULL	
337.62	0.09	100	10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, BANDS.
337.68	0.06	100	10	100% COAL, BRIGHT WITH FEW DULL BANDS	
				BASE OF DALMAYNE E2 : THICKNESS= 1.07 M; SAMPLED THICKNESS= 1.07 M	
338.00	0.32	100		100% SILTSTONE	GREY, VERY WEAK ROCK.
338.26	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS. JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
341.24	2.98	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
343.45	2.21	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.32	4.87	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
349.02	0.70	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
349.28	0.26	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
351.16	1.88	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
351.60	0.44	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
351.86	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
352.55	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
353.33	0.78	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
353.45	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
353.53	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
353.95	0.42	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
354.43	0.48	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
354.53	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
355.40	0.87	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK, VERY THINLY BEDDED.
355.85	0.45	100		60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, LENSES. WEAK ROCK.
355.95	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
356.04	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
356.55	0.51	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
357.77	1.22	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, THICKLY LAMINATED.
358.39	0.62	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK.
359.10	0.71	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
359.55	0.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
363.77	4.22	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
363.92	0.15	100		100% SHALE	COALY, LENSES, GREY, WEAK ROCK.
363.93	0.01	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
363.95	0.02	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
365.00	1.05	100		100% SILTSTONE	GREY, WEAK ROCK.
365.07	0.07	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
365.64	0.57	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK.
365.82	0.18	100		100% MUDSTONE	FISSILE, ARGILLACEOUS, BROWN, VERY WEAK ROCK.
366.83	1.01	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK.
366.93	0.10	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.
367.16	0.23	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK.
367.35	0.19	100		100% MUDSTONE	ARENACEOUS, LENSES, BROWN, WEAK ROCK.
368.10	0.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
368.85	0.75	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, WEAK ROCK.
369.60	0.75	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WITH MICA, WEAK ROCK.
370.15	0.55	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
371.00	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
371.11	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
371.23	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
371.78	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
372.69	0.91	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
373.25	0.56	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, LAMINATED.
373.60	0.35	100		100% SANDSTONE,FINE GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
374.77	1.17	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
375.07	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
375.35	0.28	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
375.53	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
376.08	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
376.62	0.54	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
377.03	0.41	100		100% SILTSTONE	ARENACEOUS, LENSES, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
378.00	0.97	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
378.41	0.41	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
378.63	0.22	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
379.23	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
379.88	0.65	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
380.35	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
380.43	0.08	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
380.63	0.20	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
380.86	0.23	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
381.03	0.17	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
381.09	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
381.43	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
382.17	0.74	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
382.30	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
382.36	0.06	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
383.06	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
383.16	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
383.64	0.48	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
384.89	1.25	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
385.06	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
385.15	0.09	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
385.38	0.23	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
386.00	0.62	100		100% SILTSTONE	GREY, WEAK ROCK.
386.07	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
386.14	0.07	100		60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY. BANDS, LIGHT GREY. WEAK ROCK.
386.22	0.08	100		100% SANDSTONE	CARBONACEOUS, STREAKS. LIGHT GREY, MODERATELY WEAK ROCK.
387.44	1.22	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
387.66	0.22	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
388.64	0.98	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
388.68	0.04	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.71	0.03	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.72	0.01	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY.
388.74	0.02	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
388.76	0.02	100		100% COAL, HEAVY DULL	
388.82	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
388.84	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
388.86	0.02	100		100% MUDSTONE	CARBONACEOUS, COALY, DARK BROWN.
389.50	0.64	100		100% SILTSTONE	GREY, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
390.65	1.15	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	BANDS, GREY. BANDS, LIGHT GREY.
390.73	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
390.79	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
391.34	0.55	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, WEAK ROCK, WITH CROSS LAMINATION, WITH FLAME/PULL STRUCTS.
391.94	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
392.00	0.06	100		100% SANDSTONE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
392.04	0.04	100		100% CLAYSTONE	FISSILE, BADLY BROKEN, BUFF, VERY WEAK ROCK.
392.06	0.02	100		100% CARBONACEOUS SHALE	BLACK, WEAK ROCK.
392.09	0.03	100		100% CLAYSTONE	FISSILE, CARBONACEOUS, BROWN, VERY WEAK ROCK.
392.11	0.02	100		100% SHALE	CARBONACEOUS, STREAKS, GREY, VERY WEAK ROCK.
393.44	1.33	100		100% SILTSTONE	GREY, WEAK ROCK.
393.72	0.28	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
393.98	0.26	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
394.87	0.89	100		100% SILTSTONE	ARENACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
395.25	0.38	100		100% SILTSTONE	ARENACEOUS, BANDS, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS.
395.87	0.62	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
396.07	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
396.24	0.17	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, WEAK ROCK.
397.00	0.76	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
397.34	0.34	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	CALCITIC, LIGHT GREY. CARBONACEOUS, BANDS, DARK GREY. MODERATELY WEAK ROCK.
398.34	1.00	100		100% SILTSTONE	GREY, VERY WEAK ROCK.
398.36	0.02	100		100% COAL, BRIGHT	
398.40	0.04	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY WEAK ROCK.
398.75	0.35	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. LIGHT GREY. WEAK ROCK.
398.98	0.23	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
399.11	0.13	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
399.19	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
399.73	0.54	100		100% SILTSTONE	ARENACEOUS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
400.80	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
401.30	0.50	100		100% SILTSTONE	GREY, WEAK ROCK.
402.09	0.79	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
402.42	0.33	100		50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	CALCITIC, LIGHT GREY. CARBONACEOUS, BANDS, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
402.61	0.19	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA. MODERATELY WEAK ROCK, THICKLY LAMINATED.
402.98	0.37	100		55% SANDSTONE,MEDIUM GRAINED 45% SILTSTONE	CALCITIC, LIGHT GREY. BANDS, GREY. MODERATELY WEAK ROCK.
403.04	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
403.39	0.35	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, WITH CROSS LAMINATION, WITH LOAD CASTS.
404.25	0.86	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. MICACEOUS, MICACEOUS, LIGHT GREY. WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
404.95	0.70	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
405.15	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
405.38	0.23	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
406.97	1.59	100		65% SILTSTONE 35% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. CALCITIC, CALCITIC, LIGHT GREY. WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
407.52	0.55	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, WEAK ROCK, WITH LOAD CASTS.
408.06	0.54	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
408.09	0.03	100		100% COAL, HEAVY DULL	
408.18	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
408.28	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
408.46	0.18	100		100% SILTSTONE	ARENACEOUS, BROWN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
408.91	0.45	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, WEAK ROCK.
409.00	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
409.15	0.15	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
409.31	0.16	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK.
410.18	0.87	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH LOAD CASTS.
410.30	0.12	100		100% SILTSTONE	GREY, WEAK ROCK.
410.42	0.12	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
411.17	0.75	100		100% SILTSTONE	FISSILE, BANDS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
411.47	0.30	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
411.67	0.20	100		60% SILTSTONE 40% CALCITE	GREY.
411.95	0.28	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
412.16	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, CARBONACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
412.52	0.36	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
412.84	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
412.94	0.10	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
413.07	0.13	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
414.49	1.42	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
414.76	0.27	100		100% SILTSTONE	ARENACEOUS, ARGILLACEOUS, GREY, WEAK ROCK.
415.64	0.88	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
415.73	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
416.40	0.67	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
416.49	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
416.55	0.06	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
416.90	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
417.19	0.29	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
417.52	0.33	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
418.41	0.89	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
418.55	0.14	100		100% SILTSTONE	GREY, WEAK ROCK.
418.91	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, CALCITIC, GREY, MODERATELY WEAK ROCK.
419.79	0.88	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
419.82	0.03	100		100% CARBONACEOUS SHALE	BLACK, VERY WEAK ROCK.
420.48	0.66	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK.
420.61	0.13	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
420.73	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
420.91	0.18	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
421.14	0.23	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
421.24	0.10	100		100% PEBBLE CONGLOMERATE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
425.00	3.76	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	3.96 M	185.95 - 190.29 M	4.34 M
DC	0.00 M	213.23 - 218.80 M	5.57 M
DC1	0.00 M	246.61 - 247.17 M	0.56 M
DDU	1.39 M	268.02 - 269.41 M	1.39 M
DDL	1.01 M	283.50 - 284.51 M	1.01 M
DE2	1.07 M	336.61 - 337.68 M	1.07 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	186.33 - 187.19 M	0.86 M
2	187.19 - 187.98 M	0.79 M
3	187.98 - 189.07 M	1.09 M
4	189.07 - 190.15 M	1.08 M
5	190.15 - 190.29 M	0.14 M
6	268.02 - 269.41 M	1.39 M
7	269.41 - 269.68 M	0.27 M
8	283.50 - 284.51 M	1.01 M
9	336.26 - 336.61 M	0.35 M
10	336.61 - 337.68 M	1.07 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 10

HOLE TYPE	CORE	
EASTING	600,100 M	GRID
NORTHING	5,385,200 M	GRID
ELEVATION	530.00 M	
TOTAL DEPTH DRILLED	500.60 M	
DRILLING STARTED	23/ 9/78	
DRILLING TIME	16 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
17.50	17.50	30		100% DOLERITE	MED.-COARSE GRAINED, FRIABLE, GREY, WEAK ROCK.
19.00	1.50	70		100% DOLERITE	MED.-COARSE GRAINED, FRIABLE, GREY, WEAK ROCK.
25.60	6.60	100		100% DOLERITE	MED.-COARSE GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
39.00	13.40	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS, STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
42.50	3.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS, STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
85.00	42.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
116.60	31.60	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
120.40	3.80	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
122.60	2.20	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
126.60	4.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
149.60	23.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
152.60	3.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
178.00	25.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
180.00	2.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG.
185.00	5.00	100		100% DOLERITE	FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
186.70	1.70	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
191.50	4.80	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
193.80	2.30	100		100% DOLERITE	FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
195.80	2.00	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
196.13	0.33	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
196.22	0.09	100		100% MUDSTONE	BAKED, BROWN, MODERATELY WEAK ROCK.
196.27	0.05	100		100% MUDSTONE	BAKED, LIGHT GREEN, MODERATELY WEAK ROCK.
196.52	0.25	100		100% MUDSTONE	CREAM, MODERATELY WEAK ROCK.
197.83	1.31	100		100% MUDSTONE	FERRUGINOUS, CHLORITIC, CREAM, MODERATELY WEAK ROCK.
200.95	3.12	100		100% MUDSTONE	FERRUGINOUS, CHLORITIC, GREY.
204.70	3.75	100		100% MUDSTONE	FERRUGINOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
207.28	2.58	100		100% MUDSTONE	PEBBLY, BANDS, GREY-GREEN, MODERATELY WEAK ROCK.
210.30	3.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
210.80	0.50	100		100% COAL, HEAVY DULL	
211.16	0.36	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
213.60	2.44	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
213.80	0.20	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
214.00	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
214.50	0.50	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
216.50	2.00	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
219.42	2.92	100		50% MUDSTONE 50% MUDSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
219.90	0.48	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
220.88	0.98	100		50% MUDSTONE 50% MUDSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
222.90	2.02	100		100% PEBBLE CONGLOMERATE	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
223.05	0.15	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, MODERATELY WEAK ROCK.
224.45	1.40	100		100% SANDSTONE	VERY FINE GRAINED, CREAM.
224.61	0.16	100		50% MUDSTONE 50% MUDSTONE	GREY. CREAM. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
225.40	0.79	100		100% MUDSTONE	SILTSTONE, CREAM, MODERATELY WEAK ROCK.
225.42	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
225.50	0.08	100		100% MUDSTONE	LIGHT BROWN.
225.54	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
225.60	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
225.73	0.13	100		100% COAL, INTERBANDED DULL AND BRIGHT	CARBONACEOUS, LAMINAE.
225.75	0.02	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LAMINAE.
229.41	3.66	100		80% SILTSTONE 20% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
231.52	2.11	100		100% SANDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
232.93	1.41	100		60% SILTSTONE 40% SANDSTONE	GREY. FINE GRAINED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
233.07	0.14	100		100% CARBONACEOUS SHALE	COALY, BANDS.
233.24	0.17	100		100% MUDSTONE	BROWN, WEAK ROCK.
233.45	0.21	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN-BLACK, MODERATELY STRONG ROCK.
233.50	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LAMINAE.
233.52	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
233.63	0.11	100		100% COAL, HEAVY DULL	BRIGHT COAL, LAMINAE.
233.96	0.33	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
234.00	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
234.19	0.19	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
234.20	0.01	100		100% MUDSTONE	GREY, WEAK ROCK.
234.25	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
235.24	0.99	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
235.34	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
236.22	0.88	100		100% MUDSTONE	GREY, WEAK ROCK.
236.26	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
238.40	2.14	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WEAK ROCK, THINLY LAMINATED.
239.65	1.25	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
239.76	0.11	100		100% CLAYSTONE	CREAM, STIFF.
240.47	0.71	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY STRONG ROCK, VERY THINLY BEDDED.
240.95	0.48	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. GREY-BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS.
241.42	0.47	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
243.69	2.27	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
244.37	0.68	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
248.78	4.41	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
257.15	8.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
257.96	0.81	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
258.30	0.34	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
260.32	2.02	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
260.42	0.10	100		100% CLAYSTONE	CREAM, STIFF.
260.45	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
260.48	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, STIFF.
260.66	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
260.74	0.08	100		100% MUDSTONE	LIGHT BROWN, FIRM.
261.58	0.84	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
262.84	1.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
262.97	0.13	100		100% CLAYSTONE	CREAM, STIFF.
263.30	0.33	100		100% MUDSTONE	BROWN-BLACK, MODERATELY STRONG ROCK.
263.69	0.39	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED.
263.79	0.10	100		100% SANDSTONE,FINE GRAINED	CREAM, WITH FRAGMENTS OF CALCITE, MODERATELY WEAK ROCK.
265.25	1.46	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, WITH BANDS OF CALCITE, MODERATELY WEAK ROCK.
266.58	1.33	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
266.79	0.21	100		100% CLAYSTONE	CREAM, WEAK ROCK.
266.80	0.01	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
267.55	0.75	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
267.85	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
269.71	1.86	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
270.04	0.33	100		100% CLAYSTONE	ARENACEOUS, CREAM, WEAK ROCK.
270.16	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WITH MUD PELLETS.
270.58	0.42	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
272.94	2.36	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, WITH CALCITE, MODERATELY WEAK ROCK.
273.39	0.45	100		100% CLAYSTONE	FISSILE, CREAM, VERY WEAK ROCK.
276.40	3.01	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
280.35	3.95	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
280.70	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
281.25	0.55	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
287.24	5.99	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
288.32	1.08	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
288.40	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
288.43	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
288.69	0.26	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
288.72	0.03	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
288.92	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : 241.08 M R.L.	
289.02	0.10	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.03	0.01	100	1	100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
289.08	0.05	100	1	100% CLAYSTONE	FISSILE, BROWN, WEAK ROCK.
289.21	0.13	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.23	0.02	100	1	100% MUDSTONE	CARBONACEOUS, DARK GREY, STRONG ROCK.
289.62	0.39	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.69	0.07	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
289.84	0.15	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
290.06	0.22	100	2	100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
290.07	0.01	100	2	100% MUDSTONE	BROWN.
290.12	0.05	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.13	0.01	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
290.17	0.04	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.21	0.04	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
290.32	0.11	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.39	0.07	100	2	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
290.43	0.04	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, WITH CALCITE ON CLEAT, MODERATELY STRONG ROCK.
290.45	0.02	100	2	100% MUDSTONE	SILTSTONE, LIGHT BROWN, WEAK ROCK.
290.58	0.13	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
290.59	0.01	100	2	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
290.60	0.01	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
290.66	0.06	100	2	100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.72	0.06	100	2	100% CLAYSTONE	CARBONACEOUS, LIGHT BROWN, STRONG ROCK.
290.77	0.05	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
290.91	0.14	100	2	100% MUDSTONE	SIDERITIC, CARBONACEOUS, DARK BROWN.
291.20	0.29	100	3	100% COAL, HEAVY DULL	
291.22	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.23	0.01	100	3	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
291.33	0.10	100	3	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
291.38	0.05	100	3	100% MUDSTONE	BRIGHT COAL, TRACES, GREY-BROWN, MODERATELY WEAK ROCK.
291.47	0.09	100	3	100% COAL, DULL	
291.56	0.09	100	3	100% COAL, HEAVY DULL	
291.69	0.13	100	3	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
291.76	0.07	100	3	100% COAL, HEAVY DULL	
291.78	0.02	100	3	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
291.90	0.12	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
292.02	0.12	100	3	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
292.05	0.03	100	3	100% MUDSTONE	BROWN, WEAK ROCK.
292.35	0.30	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
292.52	0.17	100	3	100% COAL, HEAVY DULL	
292.68	0.16	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
292.71	0.03	100	3	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
293.01	0.30	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.04	0.03	100	4	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
293.16	0.12	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.18	0.02	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK, SLOW SLAKING.
293.21	0.03	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.23	0.02	100	4	100% CLAYSTONE	FISSILE, LIGHT BROWN, STIFF, RAPID SLAKING.
293.24	0.01	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.26	0.02	100	4	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
293.42	0.16	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.44	0.02	100	4	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
293.56	0.12	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.61	0.05	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
293.67	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
293.70	0.03	100	4	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
293.84	0.14	100	4	100% MUDSTONE	CARBONACEOUS.
293.95	0.11	100	4	100% MUDSTONE	COALY, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
294.16	0.21	100	4	100% MUDSTONE	CARBONACEOUS.
294.24	0.08	100	4	100% CLAYSTONE	LIGHT BROWN, SOFT, RAPID SLAKING.
294.27	0.03	100	4	100% MUDSTONE	CARBONACEOUS.
294.31	0.04	100	4	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
294.36	0.05	100	4	100% MUDSTONE	CARBONACEOUS.
294.39	0.03	100	4	100% MUDSTONE	FISSILE, WEAK ROCK.
294.43	0.04	100	4	100% MUDSTONE	FISSILE, STIFF.
294.80	0.37	100	4	100% MUDSTONE	CARBONACEOUS.
294.84	0.04	100	4	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, WEAK ROCK.
294.94	0.10	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
295.08	0.14	100	4	100% MUDSTONE	CARBONACEOUS.
295.20	0.12	100	4	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
295.26	0.06	100	4	100% MUDSTONE	CARBONACEOUS.
295.30	0.04	100	4	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
295.38	0.08	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
295.41	0.03	100	4	100% MUDSTONE	CARBONACEOUS, MODERATELY WEAK ROCK.
295.62	0.21	100	4	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, WEAK ROCK.
295.70	0.08	100	4	100% MUDSTONE	CARBONACEOUS.
295.73	0.03	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
295.75	0.02	100	4	100% MUDSTONE	CARBONACEOUS.
295.77	0.02	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
295.90	0.13	100	4	100% MUDSTONE	CARBONACEOUS.
295.95	0.05	100	4	100% MUDSTONE	FISSILE, LIGHT BROWN, STIFF.
296.03	0.08	100	5	100% MUDSTONE	CARBONACEOUS.
296.06	0.03	100	5	100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
296.34	0.28	100	5	100% MUDSTONE	CARBONACEOUS.
296.39	0.05	100	5	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
296.61	0.22	100	5	100% MUDSTONE	CARBONACEOUS.
296.86	0.25	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
296.87	0.01	100	5	100% COAL, BRIGHT	
297.09	0.22	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
297.11	0.02	100	5	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
297.16	0.05	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
297.52	0.36	100	6	100% MUDSTONE	COALY, TRACES, GREY, MODERATELY WEAK ROCK.
297.57	0.05	100	6	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
297.62	0.05	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	
297.77	0.15	100	6	100% MUDSTONE	BRIGHT COAL, LAMINAE, DARK BROWN.
297.95	0.18	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
				BASE OF DALMAYNE B : THICKNESS= 9.03 M; SAMPLED THICKNESS= 9.03 M	
298.95	1.00	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
299.73	0.78	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, LAMINATED.
302.89	3.16	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
303.27	0.38	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
303.31	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
303.43	0.12	100		100% MUDSTONE	GREY, WITH LENSES OF CALCITE, MODERATELY WEAK ROCK.
305.45	2.02	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
306.55	1.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
307.33	0.78	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
307.58	0.25	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
308.66	1.08	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
308.96	0.30	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
311.02	2.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE C : 218.98 M R.L.		
311.07	0.05	100		100% MUDSTONE	BROWN, WEAK ROCK.
311.34	0.27	100	7	70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
311.39	0.05	100	7	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
311.89	0.50	100	7	90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BROWN. THICKLY LAMINATED.
311.96	0.07	100	7	100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
312.08	0.12	100	8	100% MUDSTONE	CARBONACEOUS, MODERATELY STRONG ROCK.
312.23	0.15	100	8	100% COAL, HEAVY DULL	
312.33	0.10	100	8	100% MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK.
312.36	0.03	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
312.42	0.06	100	8	100% COAL, HEAVY DULL	
312.52	0.10	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
312.60	0.08	100	8	100% MUDSTONE	BLACK, MODERATELY STRONG ROCK.
312.76	0.16	100	8	100% COAL, HEAVY DULL	
312.80	0.04	100	8	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.09	0.29	100	8	100% COAL, HEAVY DULL	MUDSTONE, BANDS.
313.10	0.01	100	8	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.12	0.02	100	8	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
313.22	0.10	100	8	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.33	0.11	100	8	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
313.44	0.11	100	8	100% COAL, HEAVY DULL	
313.49	0.05	100	8	100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
313.52	0.03	100	8	100% COAL, HEAVY DULL	
313.61	0.09	100	8	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
313.73	0.12	100	8	100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
313.80	0.07	100	8	60% MUDSTONE 40% MUDSTONE	LIGHT BROWN. CARBONACEOUS. MODERATELY WEAK ROCK.
313.95	0.15	100	8	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
313.96	0.01	100	8	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.98	0.02	100	8	100% COAL, HEAVY DULL	
314.01	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE C : THICKNESS= 2.99 M; SAMPLED THICKNESS= 2.91 M			
314.19	0.18	100		100% MUDSTONE	SHALY, WEAK ROCK.
314.31	0.12	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
364.38	50.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
		TOP OF DALMAYNE D UPPER : 165.62 M R.L.			
364.76	0.38	100	9	100% COAL, DULL	BRIGHT COAL, STREAKS.
364.77	0.01	100	9	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
364.84	0.07	100	9	100% COAL, DULL	
364.92	0.08	100	9	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
365.00	0.08	100	9	100% COAL, DULL	
365.24	0.24	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	
365.25	0.01	100	9	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
365.27	0.02	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	
365.28	0.01	100	9	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
365.33	0.05	100	9	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
365.64	0.31	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	
		BASE OF DALMAYNE D UPPER : THICKNESS= 1.26 M; SAMPLED THICKNESS= 1.26 M			
366.29	0.65	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
366.52	0.23	100		100% SHALE	GREY, WEAK ROCK.
366.57	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
366.73	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
366.98	0.25	100		100% MUDSTONE	SHALY, GREY, MODERATELY WEAK ROCK.
367.19	0.21	100		100% COAL, DULL	
367.26	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
367.37	0.11	100		100% MUDSTONE	FISSILE, BROWN, VERY WEAK ROCK.
367.77	0.40	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
368.09	0.32	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
368.65	0.56	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
369.05	0.40	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
369.21	0.16	100		100% MUDSTONE	FISSILE, LAMINAE, GREY, VERY WEAK ROCK.
369.26	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
369.60	0.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
369.93	0.33	100		50% SILTSTONE 50% SILTSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
377.02	7.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
377.33	0.31	100		100% SILTSTONE	FISSILE, GREY, MODERATELY WEAK ROCK, LAMINATED.
378.10	0.77	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
379.90	1.80	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
380.00	0.10	100		100% SANDSTONE,COARSE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
380.05	0.05	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
381.60	1.55	100		100% MUDSTONE	SILTSTONE, BANDS, LIGHT GREY, WEAK ROCK.
382.48	0.88	100		50% SANDSTONE 50% MUDSTONE	FINE GRAINED, LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL.
382.64	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
382.92	0.28	100		100% SILTSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
382.95	0.03	100		100% SHALE	CARBONACEOUS, BADLY BROKEN.
382.98	0.03	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
383.01	0.03	100		100% CARBONACEOUS SHALE	
383.02	0.01	100		100% MUDSTONE	LIGHT BROWN.
383.12	0.10	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BADLY BROKEN. SILTSTONE.
384.05	0.93	0		CORE LOSS	
384.30	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
384.32	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
384.34	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
384.54	0.20	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
384.60	0.06	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
384.94	0.34	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
385.06	0.12	100		100% SANDSTONE	MUDSTONE, LENSES, LIGHT GREY, MOLERATELY WEAK ROCK.
408.77	23.71	100		100% SANDSTONE,MEDIUM GRAINED	MODERATELY WEAK ROCK, MEDIUM BEDDED, WIDELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
408.87	0.10	100		100% IRONSTONE	
409.00	0.13	100		100% MUDSTONE	SILTSTONE, LIGHT GREY.
424.19	15.19	100		100% SANDSTONE,MEDIUM GRAINED	MODERATELY WEAK ROCK, MEDIUM BEDDED, WITH MUD PELLETS, WIDELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
424.62	0.43	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
425.18	0.56	100		60% MUDSTONE 40% MUDSTONE	DARK GREY. LAMINAE, LIGHT GREY.
425.63	0.45	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
425.76	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
426.45	0.69	100		100% MUDSTONE	GREY, WEAK ROCK.
426.50	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
427.18	0.68	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
427.42	0.24	100		100% MUDSTONE	GREY, WITH FRAGMENTS OF CALCITE, MODERATELY WEAK ROCK.
427.86	0.44	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
427.96	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
428.60	0.64	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
430.23	1.63	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREEN. SILTSTONE, GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
430.67	0.44	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
431.00	0.33	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
431.10	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
			TOP OF DALMAYNE E2 : 98.90 M R.L.		
431.23	0.13	100		100% COAL, HEAVY DULL	
431.25	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
431.27	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
431.45	0.18	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
431.60	0.15	100		100% COAL, HEAVY DULL	
431.65	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
			BASE OF DALMAYNE E2 : THICKNESS= 0.55 M; SAMPLED THICKNESS= 0.00 M		
431.96	0.31	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
432.42	0.46	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
433.82	1.40	100		100% MUDSTONE	WITH BANDS OF CALCITE, WEAK ROCK.
435.95	2.13	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
435.99	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
436.03	0.04	100		100% COAL, HEAVY DULL	
436.11	0.08	100		100% MUDSTONE	BROWN-BLACK, WITH BANDS OF CLAY, MODERATELY STRONG ROCK.
436.30	0.19	100		100% SILTSTONE	CARBONACEOUS, DARK GREY.
437.02	0.72	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK.
			TOP OF DALMAYNE E3 : 92.98 M R.L.		
437.24	0.22	100		100% COAL, HEAVY DULL	WITH BANDS OF CLAY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF DALMANE E3 : THICKNESS= 0.22 M; SAMPLED THICKNESS= 0.00 M	
437.33	0.09	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
438.20	0.87	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
443.35	5.15	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
444.04	0.69	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
444.50	0.46	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
444.83	0.33	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH PYRITE.
444.88	0.05	100		100% MUDSTONE	FISSILE, BROWN, FIRM.
445.25	0.37	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
445.48	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
446.82	1.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
447.36	0.54	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
448.02	0.66	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
449.44	1.42	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
449.65	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
449.80	0.15	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
450.68	0.88	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. CARBONACEOUS, LAMINAE, GREY-BROWN. MODERATELY WEAK ROCK.
452.09	1.41	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
457.41	5.32	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
457.61	0.20	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WITH MUD PELLETS.
458.04	0.43	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, MODERATELY WEAK ROCK.
460.69	2.65	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
460.75	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
460.82	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
461.19	0.37	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
470.62	9.43	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS.
472.40	1.78	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
472.80	0.40	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
472.92	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
473.70	0.78	100		100% MUDSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
474.65	0.95	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
475.15	0.50	100		100% MUDSTONE	BADLY BROKEN, DARK GREY, WEAK ROCK.
475.30	0.15	0		CORE LOSS	
475.45	0.15	100		100% MUDSTONE	GREY, WEAK ROCK.
475.65	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
475.80	0.15	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY-BROWN, MODERATELY WEAK ROCK.
475.90	0.10	100		100% MUDSTONE	BADLY BROKEN, GREY, WEAK ROCK.
476.30	0.40	0		CORE LOSS	
476.45	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
476.51	0.06	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK.
476.52	0.01	100		100% MUDSTONE	CARBONACEOUS, FISSILE, DARK BROWN, VERY WEAK ROCK.
477.28	0.76	100		100% MUDSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
479.40	2.12	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
480.06	0.66	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY.
480.16	0.10	100		100% MUDSTONE	DARK GREY.
480.50	0.34	100		100% SILTSTONE	LIGHT GREY.
485.75	5.25	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
486.75	1.00	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
486.83	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
486.85	0.02	100		100% MUDSTONE	CALCAREOUS, BROWN, SOFT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
486.96	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
487.20	0.24	100		100% LIMESTONE	
488.05	0.85	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
488.80	0.75	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, THICKLY LAMINATED.
489.10	0.30	100		100% MUDSTONE	GREY.
489.72	0.62	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
490.25	0.53	100		100% MUDSTONE	SILTSTONE, LENSES, GREY, THINLY LAMINATED.
490.40	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
490.90	0.50	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
491.20	0.30	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
491.25	0.05	100		100% MUDSTONE	CARBONACEOUS.
492.70	1.45	100		100% MUDSTONE	SILTSTONE, GREY-GREEN.
492.80	0.10	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
493.10	0.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
493.90	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, CREAM, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
494.75	0.85	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
496.20	1.45	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. DARK GREY. MODERATELY WEAK ROCK.
498.80	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH FRAGMENTS OF QUARTZ, THINLY BEDDED.
500.60	1.80	100		100% SILTSTONE	GREY, WITH FRAGMENTS OF QUARTZ.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	9.03 M	288.92 - 297.95 M	9.03 M
DC	2.91 M	311.02 - 314.01 M	2.99 M
DDU	1.26 M	364.38 - 365.64 M	1.26 M
DE2	0.00 M	431.10 - 431.65 M	0.55 M
DE3	0.00 M	437.02 - 437.24 M	0.22 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	288.92 - 289.84 M	0.92 M
2	289.84 - 290.91 M	1.07 M
3	290.91 - 292.71 M	1.80 M
4	292.71 - 295.95 M	3.24 M
5	295.95 - 297.16 M	1.21 M
6	297.16 - 297.95 M	0.79 M
7	311.07 - 311.96 M	0.89 M
8	311.96 - 313.98 M	2.02 M
9	364.38 - 365.64 M	1.26 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 10A

HOLE TYPE	CORE	
EASTING	600,100 M	GRID
NORTHING	5,385,200 M	GRID
ELEVATION	530.00 M	
TOTAL DEPTH DRILLED	391.60 M	
DRILLING STARTED	13/11/78	
DRILLING TIME	14 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	102.60 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
197.60	197.60	100		100% DOLERITE	
208.77	11.17	100		100% MUDSTONE	ARENACEOUS, BANDS, MODERATELY WEAK ROCK, THINLY BEDDED.
209.55	0.78	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH MUD PELLETS.
210.35	0.80	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
214.85	4.50	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
221.20	6.35	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
223.50	2.30	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK.
224.00	0.50	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
225.40	1.40	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
225.50	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
226.60	1.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
229.40	2.80	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, TRACES, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
229.43	0.03	100		100% COAL, BRIGHT	
231.05	1.62	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
232.60	1.55	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
232.90	0.30	100		100% CLAYSTONE	CREAM, MODERATELY WEAK ROCK.
233.25	0.35	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
235.20	1.95	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
237.05	1.85	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
240.65	3.60	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
241.90	1.25	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
249.90	8.00	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
252.60	2.70	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
253.35	0.75	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
254.50	1.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
258.52	4.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
258.98	0.46	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
259.07	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
259.14	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
261.30	2.16	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
261.43	0.13	100		100% CLAYSTONE	FISSILE, GREEN, VERY WEAK ROCK.
261.60	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
261.68	0.08	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
263.86	2.18	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
264.01	0.15	100		100% CLAYSTONE	LIGHT GREEN, VERY WEAK ROCK.
264.25	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
265.30	1.05	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
267.52	2.22	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
267.73	0.21	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
268.65	0.92	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
270.55	1.90	100		100% SILTSTONE	MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
270.85	0.30	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
270.99	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
271.64	0.65	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
273.50	1.86	100		100% SILTSTONE	CALCITIC, BANDS, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
274.47	0.97	100		60% CLAYSTONE 40% MUDSTONE	FISSILE, MICACEOUS, LIGHT GREEN. BANDS, SILTSTONE, GREY. VERY WEAK ROCK.
277.80	3.33	100		100% SILTSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
281.34	3.54	100		65% SILTSTONE 35% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
282.24	0.90	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
284.57	2.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
284.80	0.23	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
285.96	1.16	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
286.04	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
288.05	2.01	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
289.47	1.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
289.60	0.13	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
289.65	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
289.72	0.07	100		100% CLAYSTONE	CARBONACEOUS, LENSES, LIGHT GREEN, VERY WEAK ROCK.
289.78	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.79	0.01	100		100% COAL, BRIGHT	
289.84	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
290.09	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
290.12	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
290.13	0.01	100		100% MUDSTONE	COALY, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
290.32	0.19	100		100% COAL, HEAVY DULL	
290.37	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
290.45	0.08	100		100% COAL, HEAVY DULL	
290.62	0.17	100		100% CLAYSTONE	ARENACEOUS, LENSES, LIGHT GREEN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
290.64	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
290.69	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
290.71	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.78	0.07	100		100% COAL, HEAVY DULL	
290.82	0.04	100		100% MUDSTONE	SILTSTONE, LENSES, BROWN, MODERATELY WEAK ROCK.
290.88	0.06	100		100% COAL, HEAVY DULL	
290.95	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.03	0.08	100		100% MUDSTONE	ARGILLACEOUS, BANDS, BROWN, WEAK ROCK.
291.05	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.09	0.04	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
291.31	0.22	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
291.43	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
291.47	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.53	0.06	100		100% MUDSTONE	BRIGHT COAL, BANDS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.54	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
291.56	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
291.61	0.05	100		100% MUDSTONE	CARBONACEOUS, CALCITIC, DARK BROWN, MODERATELY STRONG ROCK.
291.72	0.11	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
291.87	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
291.98	0.11	100		100% COAL, HEAVY DULL	
291.99	0.01	100		100% MUDSTONE	BROWN.
292.10	0.11	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
292.20	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
292.29	0.09	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
292.37	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
292.45	0.08	100		100% COAL, HEAVY DULL	
292.46	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	
292.48	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
292.51	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
292.56	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
292.58	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
292.64	0.06	100		100% COAL, HEAVY DULL	
292.75	0.11	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
292.92	0.17	100		100% COAL, HEAVY DULL	
293.03	0.11	100		100% COAL, HEAVY DULL	WITH MUD PELLETS.
293.05	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
293.18	0.13	100		100% COAL, HEAVY DULL	
293.22	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
293.37	0.15	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
293.39	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
293.43	0.04	100		100% COAL, HEAVY DULL	
293.49	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
293.55	0.06	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
293.65	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
293.80	0.15	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH MUD PELLETS.
293.83	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
293.86	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
293.88	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
294.00	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
294.14	0.14	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
294.24	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
294.41	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
294.46	0.05	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
294.53	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
294.59	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
294.66	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
294.69	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
294.72	0.03	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
294.89	0.17	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
294.92	0.03	100		100% MUDSTONE	CALCITIC, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
294.95	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
294.97	0.02	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
295.02	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
295.13	0.11	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
295.31	0.18	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
295.33	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
295.45	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
295.47	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
295.52	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
295.60	0.08	100		100% COAL, HEAVY DULL	
295.69	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
295.83	0.14	100		100% CLAYSTONE	CALCITIC, BANDS, LIGHT GREEN, VERY WEAK ROCK.
296.03	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
296.07	0.04	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
296.09	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
296.14	0.05	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
296.26	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
296.30	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
296.50	0.20	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, WEAK ROCK.
296.56	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
296.60	0.04	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
296.76	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
296.80	0.04	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
296.94	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
296.99	0.05	100		100% COAL, HEAVY DULL	
297.14	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
297.19	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
297.23	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
297.32	0.09	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
297.36	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
297.46	0.10	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT GREEN, MODERATELY WEAK ROCK.
297.62	0.16	100		100% COAL, HEAVY DULL	
297.80	0.18	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
297.85	0.05	100		100% COAL, DULL	
297.98	0.13	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
298.05	0.07	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
298.40	0.35	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
298.45	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
298.48	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
298.60	0.12	100		100% COAL, HEAVY DULL	
299.65	1.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
303.96	4.31	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
304.46	0.50	100		100% SANDSTONE,FINE GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
304.88	0.42	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
305.08	0.20	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
307.43	2.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
308.20	0.77	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
310.60	2.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
311.40	0.80	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
311.59	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
311.61	0.02	100		100% COAL, DULL	
311.63	0.02	100		100% COAL, HEAVY DULL	
311.67	0.04	100		100% MUDSTONE	BROWN, WEAK ROCK.
311.74	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
311.87	0.13	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
311.90	0.03	100		100% COAL, HEAVY DULL	
311.91	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
311.97	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
312.00	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
312.11	0.11	100		100% COAL, HEAVY DULL	
312.30	0.19	100		100% MUDSTONE	FISSILE, LIGHT GREEN, WITH MICA, WEAK ROCK.
312.34	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
312.40	0.06	100		100% COAL, HEAVY DULL	
312.45	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
312.51	0.06	100		100% COAL, HEAVY DULL	
312.60	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
312.62	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
312.63	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
312.67	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
312.85	0.18	100		100% COAL, HEAVY DULL	
312.94	0.09	100		100% MUDSTONE	FISSILE, BROWN, WEAK ROCK.
313.12	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
313.18	0.06	100		100% COAL, HEAVY DULL	
313.24	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
313.34	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
313.36	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.39	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
313.46	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
313.50	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
313.55	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
313.58	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
313.70	0.12	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
313.74	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
313.80	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
313.88	0.08	100		100% COAL, HEAVY DULL	
313.89	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
313.97	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
314.16	0.19	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
314.18	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
314.27	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.28	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
314.35	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, WITH MUD PELLETS.
314.40	0.05	100		100% COAL, HEAVY DULL	WITH MUD PELLETS.
314.43	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH MUD PELLETS.
314.46	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS, WITH MUD PELLETS.
314.49	0.03	100		100% COAL, HEAVY DULL	WITH MUD PELLETS.
314.57	0.08	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
314.60	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
314.65	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	
314.68	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
314.74	0.06	100		100% MUDSTONE	BRIGHT COAL, LENSES, BROWN, MODERATELY WEAK ROCK.
314.76	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
314.79	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
314.89	0.10	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
314.91	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
314.94	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
314.97	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
315.00	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
315.30	0.30	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
315.65	0.35	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS.
325.90	10.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
327.00	1.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
327.06	0.06	100		100% MUDSTONE	CALCITIC, FISSILE, BROWN, WEAK ROCK.
333.60	6.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
334.10	0.50	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
346.07	11.97	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
346.17	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.08	1.91	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
348.97	0.89	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
351.01	2.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
351.41	0.40	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
352.00	0.59	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
365.90	13.90	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE D UPPER : 164.10 M R.L.	
366.16	0.26	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
366.19	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
366.26	0.07	100		100% COAL, DULL	
366.27	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
366.32	0.05	100		100% COAL, HEAVY DULL	
366.37	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
366.39	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
366.52	0.13	100		100% COAL, HEAVY DULL	
366.55	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
366.67	0.12	100		100% COAL, DULL	
366.88	0.21	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
366.96	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
367.06	0.10	100		100% COAL, DULL	
367.15	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.25 M; SAMPLED THICKNESS= 0.00 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
367.46	0.31	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
367.68	0.22	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
367.84	0.16	100		100% MUDSTONE	GREY, WEAK ROCK.
367.92	0.08	100		100% COAL, HEAVY DULL	
367.93	0.01	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
367.96	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
367.98	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
368.04	0.06	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
368.26	0.22	100		100% MUDSTONE	FISSILE, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
368.34	0.08	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
368.36	0.02	100		100% MUDSTONE	CARBONACEOUS, FISSILE, DARK GREY, MODERATELY WEAK ROCK.
368.39	0.03	100		100% COAL, HEAVY DULL	
368.43	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
368.53	0.10	100		100% COAL, DULL	
368.59	0.06	100		100% COAL, HEAVY DULL	
368.66	0.07	100		100% COAL, DULL	
368.71	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
370.60	1.89	35		100% MUDSTONE	SILTSTONE, GREY.
370.85	0.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
374.05	3.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
375.53	1.48	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
376.63	1.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
376.92	0.29	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
377.88	0.96	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
378.33	0.45	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
380.53	2.20	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
380.58	0.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
380.78	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
382.60	1.82	40		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
383.37	0.77	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
383.44	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
383.46	0.02	100		100% MUDSTONE	FISSILE, BROWN, WEAK ROCK.
383.48	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, FIRM.
383.94	0.46	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
384.03	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
384.10	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN-BLACK, MODERATELY STRONG ROCK.
384.12	0.02	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
384.17	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
384.20	0.03	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY WEAK ROCK.
384.27	0.07	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
384.34	0.07	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
384.49	0.15	100		100% MUDSTONE	ARENACEOUS, GREY, WEAK ROCK.
385.90	1.41	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
385.98	0.08	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
387.75	1.77	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
388.02	0.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
389.04	1.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
390.45	1.41	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
391.60	1.15	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DDU	0.00 M	365.90 - 367.15 M	1.25 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 11

HOLE TYPE	CORE	
EASTING	596,000 M	GRID
NORTHING	5,385,000 M	GRID
ELEVATION	590.00 M	
TOTAL DEPTH DRILLED	473.00 M	
DRILLING STARTED	5/10/78	
DRILLING TIME	14 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	10.00 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	
PETROPHYSICAL WIRELINE LOGS RUN :		

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
7.80	7.80			100% DOLERITE	MODERATELY WEATHERED.
11.25	3.45			100% DOLERITE	HIGHLY WEATHERED.
14.20	2.95			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
15.00	0.80			100% DOLERITE	BADLY BROKEN, MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
20.40	5.40			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
23.00	2.60			100% DOLERITE	MED.-COARSE GRAINED, GREY, UNWEATHERED.
27.50	4.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
28.50	1.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
36.00	7.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
48.50	12.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
55.50	7.00			100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
57.50	2.00			100% DOLERITE	MEDIUM GRAINED, LIGHT BROWN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
59.50	2.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
63.00	3.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
75.00	12.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
81.00	6.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
83.50	2.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.50	6.00			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
110.00	20.50			100% DOLERITE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
120.00	10.00			100% DOLERITE	MEDIUM GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.00	4.00			100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
125.00	1.00			100% DOLERITE	FINE GRAINED, GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
125.34	0.34			100% DOLERITE	FINE GRAINED, GREY, MODERATELY STRONG ROCK.
125.92	0.58			100% DOLERITE	FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
126.00	0.08			100% MUDSTONE	GREY, WEAK ROCK.
126.74	0.74			100% SANDSTONE	FINE GRAINED, GREY, MODERATELY WEAK ROCK.
133.90	7.16			100% MUDSTONE	GREEN, MODERATELY WEAK ROCK.
135.00	1.10			100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
135.55	0.55			100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
136.50	0.95			100% MUDSTONE	ARENACEOUS, BANDS, CREAM, MODERATELY WEAK ROCK.
136.70	0.20			100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
137.40	0.70			100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
138.10	0.70			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
138.20	0.10			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
142.39	4.19			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, LAMINATED.
143.27	0.88			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
143.50	0.23			80% MUDSTONE 20% COAL, BRIGHT	CARBONACEOUS, BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED.
143.88	0.38			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
143.97	0.09			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
145.00	1.03			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
145.78	0.78			100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH PLANT REMAINS.
147.00	1.22			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
147.34	0.34			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
147.44	0.10			100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
147.91	0.47			100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
148.00	0.09			100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
149.22	1.22	45		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WEAK ROCK.
149.51	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
150.35	0.84	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, WEAK ROCK.
151.17	0.82	100		70% SANDSTONE,MEDIUM GRAINED 30% PEBBLE CONGLOMERATE	COALY, LENSES, LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK.
152.40	1.23	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, BANDS.
152.76	0.36	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
152.98	0.22	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
153.09	0.11	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
153.39	0.30	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, WEAK ROCK.
153.78	0.39	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
157.38	3.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WEAK ROCK.
157.54	0.16	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
160.03	2.49	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
161.06	1.03	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
161.86	0.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
162.26	0.40	100		100% SANDSTONE,MEDIUM GRAINED	BRIGHT COAL, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
162.55	0.29	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY. LIGHT GREY. WEAK ROCK.
163.17	0.62	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
163.78	0.61	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
165.05	1.27	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
165.49	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
166.71	1.22	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
166.97	0.26	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY. SILTSTONE, LAMINAE, GREY. MODERATELY WEAK ROCK.
167.45	0.48	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
169.40	1.95	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACECUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
169.67	0.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
171.81	2.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
171.88	0.07	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT GREY, WEAK ROCK.
171.96	0.08	100		100% SILTSTONE	GREY, WEAK ROCK.
172.27	0.31	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
172.61	0.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK, WITH MUD PELLETS.
172.63	0.02	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
172.65	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
172.75	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
172.76	0.01	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
172.79	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
172.84	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
172.88	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
173.10	0.22	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
174.15	1.05	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.39	0.24	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
174.95	0.56	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
175.73	0.78	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE.
176.05	0.32	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
176.14	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
176.32	0.18	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
176.66	0.34	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
176.88	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS.
176.97	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY, WEAK ROCK.
177.21	0.24	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
177.50	0.29	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
177.60	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
177.65	0.05	100		100% CLAYSTONE	BADLY BROKEN, LIGHT BROWN, FIRM.
177.68	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
177.86	0.18	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
177.89	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
177.90	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
177.92	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
177.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
177.97	0.02	100		100% COAL, BRIGHT	
178.05	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
179.00	0.95	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
179.06	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH MUD PELLETS.
179.09	0.03	100		100% SILTSTONE	LIGHT GREY, WEAK ROCK.
179.20	0.11	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
180.84	1.64	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
181.07	0.23	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
181.53	0.46	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
182.00	0.47	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
184.75	2.75	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK.
185.30	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
187.90	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
189.24	1.34	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
189.96	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
190.16	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
190.19	0.03	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, LIGHT GREY, WEAK ROCK.
190.49	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
190.59	0.10	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
190.70	0.11	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
191.52	0.82	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
191.57	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
191.78	0.21	100		100% SILTSTONE	GREY, WEAK ROCK.
193.55	1.77	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
193.70	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, COALY, LIGHT GREY, WEAK ROCK.
194.40	0.70	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
194.85	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
194.95	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, WEAK ROCK.
195.04	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
195.79	0.75	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
196.13	0.34	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
196.33	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.76	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.91	0.15	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, WEAK ROCK.
198.00	1.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
199.45	1.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
199.47	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
199.48	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	
199.51	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
199.55	0.04	100		100% COAL, HEAVY DULL	
199.80	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
200.18	0.38	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
200.26	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
200.28	0.02	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
200.48	0.20	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK.
200.75	0.27	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
200.78	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
200.87	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK, WITH PLANT REMAINS.
200.91	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, SOFT.
201.15	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
201.34	0.19	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
201.40	0.06	100		100% CLAYSTONE	FISSILE, BROWN, SOFT.
201.60	0.20	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
201.68	0.08	100		100% CARBONACEOUS SHALE	
201.75	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
201.92	0.17	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, SOFT.
201.95	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
202.04	0.09	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
202.24	0.20	100		100% COAL, INTERBANDED DULL AND BRIGHT	
202.33	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
204.28	1.95	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
204.48	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREEN, VERY WEAK ROCK.
205.02	0.54	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
206.49	1.47	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
206.61	0.12	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, FIRM.
206.65	0.04	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK.
206.71	0.06	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
206.82	0.11	100		100% SILTSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
206.89	0.07	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
206.95	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
206.98	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
207.55	0.57	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
207.87	0.32	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT GREEN, WITH MICA, VERY WEAK ROCK.
208.28	0.41	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
208.36	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
208.46	0.10	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
208.56	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
208.63	0.07	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK, WITH MUD PELLETS.
208.72	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
208.94	0.22	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
209.00	0.06	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
209.09	0.09	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
209.31	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
209.34	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
209.43	0.09	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
209.50	0.07	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
209.53	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
209.56	0.03	100		100% SILTSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK.
209.65	0.09	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
209.75	0.10	100		100% SILTSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
210.09	0.34	100		100% SILTSTONE	COALY, STREAKS, GREY, WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
211.12	1.03	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
211.47	0.35	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
214.68	3.21	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
214.91	0.23	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, FIRM.
214.95	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
214.97	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
215.00	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
215.03	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
215.18	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
215.40	0.22	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN, WEAK ROCK.
215.59	0.19	100		100% MUDSTONE	COALY, LENSES, BROWN, WEAK ROCK.
215.74	0.15	100		100% SILTSTONE	COALY, LENSES, LIGHT BROWN, WEAK ROCK.
217.11	1.37	100		100% SILTSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
218.64	1.53	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
220.36	1.72	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
224.76	4.40	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
225.44	0.68	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
225.89	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
227.00	1.11	100		100% SANDSTONE,FINE GRAINED	CALCITIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
227.40	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
230.42	3.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
230.57	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
230.81	0.24	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
231.30	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
231.52	0.22	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
231.54	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
231.74	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
232.18	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.44	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
232.54	0.10	100		100% COAL, HEAVY DULL	MUDSTONE, FRAGMENTS.
232.56	0.02	100		100% MUDSTONE	GREY.
232.58	0.02	100		100% COAL, HEAVY DULL	
232.62	0.04	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS.
232.65	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
232.77	0.12	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
233.18	0.41	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
233.37	0.19	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
233.39	0.02	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
233.44	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN.
233.50	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
233.60	0.10	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
233.63	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
233.69	0.06	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
233.75	0.06	100		100% COAL, HEAVY DULL	
233.78	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
233.81	0.03	100		100% COAL, HEAVY DULL	
233.82	0.01	100		100% MUDSTONE	GREY.
233.86	0.04	100		100% CARBONACEOUS SHALE	
233.88	0.02	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
233.89	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
233.92	0.03	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
233.99	0.07	100		100% CARBONACEOUS SHALE	HEAVY DULL COAL, LENSES.
234.05	0.06	100		100% MUDSTONE	SIDERITIC, DARK BROWN.
234.32	0.27	100		50% MUDSTONE 50% CARBONACEOUS SHALE	CARBONACEOUS, DARK BROWN. HEAVY DULL COAL, LENSES.
234.34	0.02	100		100% CARBONACEOUS SHALE	
234.38	0.04	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES.
234.40	0.02	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
234.52	0.12	100		100% CARBONACEOUS SHALE	
234.62	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
234.77	0.15	100		100% CARBONACEOUS SHALE	
234.79	0.02	100		100% SANDSTONE	LITHIC, GREY, VERY WEAK ROCK.
234.92	0.13	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
235.04	0.12	100		100% CARBONACEOUS SHALE	
235.07	0.03	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
235.10	0.03	100		100% CARBONACEOUS SHALE	
235.16	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
235.33	0.17	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.
235.56	0.23	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS, MODERATELY WEAK ROCK.
235.73	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
236.69	0.96	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, RAPID SLAKING.
236.81	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, STRONG ROCK.
237.06	0.25	100		100% CARBONACEOUS SHALE	MUDSTONE, FRAGMENTS, STRONG ROCK.
237.09	0.03	100		100% MUDSTONE	GREY, WEAK ROCK, RAPID SLAKING.
237.18	0.09	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES, STRONG ROCK.
237.39	0.21	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
237.46	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
237.71	0.25	100		100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
237.86	0.15	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY STRONG ROCK.
237.99	0.13	100		100% CARBONACEOUS SHALE	
238.00	0.01	100		100% MUDSTONE	DARK GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
238.02	0.02	100		100% CARBONACEOUS SHALE	
238.05	0.03	100		100% MUDSTONE	GREY.
238.06	0.01	100		100% CARBONACEOUS SHALE	
238.11	0.05	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
238.21	0.10	100		100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
238.26	0.05	100		100% COAL, DULL	
238.30	0.04	100		100% CARBONACEOUS SHALE	
238.33	0.03	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
238.77	0.44	100		100% CARBONACEOUS SHALE	BRIGHT COAL, LENSES, MODERATELY WEAK ROCK.
238.87	0.10	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
238.90	0.03	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
239.00	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
239.35	0.35	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, WITH PLANT REMAINS.
240.01	0.66	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
240.11	0.10	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.
240.14	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
240.63	0.49	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
240.72	0.09	100		100% CLAYSTONE	FISSILE, BROWN, VERY WEAK ROCK.
240.97	0.25	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
241.02	0.05	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, VERY WEAK ROCK.
241.07	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.12	0.05	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, MODERATELY STRONG ROCK.
241.28	0.16	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
241.35	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
241.47	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
241.59	0.12	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
241.77	0.18	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
241.84	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
241.87	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
242.00	0.13	100		70% MUDSTONE 30% CLAYSTONE	CARBONACEOUS, BANDS, DARK BROWN. LIGHT BROWN.
242.14	0.14	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
242.30	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
242.46	0.16	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
242.52	0.06	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.
242.58	0.06	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK, WEAK ROCK.
242.61	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
242.78	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
242.85	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
243.03	0.18	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
243.06	0.03	100		100% COAL, HEAVY DULL	
243.12	0.06	100		100% COAL, DULL	
243.13	0.01	100		100% COAL, BRIGHT	
243.19	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
243.48	0.29	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
244.60	1.12	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
246.50	1.90	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
247.37	0.87	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
248.45	1.08	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
248.97	0.52	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
249.05	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
249.40	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
252.40	3.00	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
254.54	2.14	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
255.47	0.93	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
258.39	2.92	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
259.40	1.01	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
259.58	0.18	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
259.63	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
259.87	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN.
259.89	0.02	100		100% COAL, HEAVY DULL	STRONG ROCK.
259.93	0.04	100		100% MUDSTONE	CREAM.
259.97	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN.
260.00	0.03	100		100% COAL, HEAVY DULL	
260.08	0.08	100		100% COAL, INTERBANDED DULL AND BRIGHT	CALCITIC, CHERTY.
260.10	0.02	100		100% MUDSTONE	DARK GREY.
260.11	0.01	100		100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
260.13	0.02	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
260.16	0.03	100		100% MUDSTONE	BROWN, WEAK ROCK.
260.29	0.13	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
260.53	0.24	100		100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
260.60	0.07	100		100% MUDSTONE	CARBONACEOUS, GREY.
260.63	0.03	100		100% MUDSTONE	BROWN, WEAK ROCK.
260.71	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
260.79	0.08	100		100% MUDSTONE	BROWN, WEAK ROCK.
261.03	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK.
261.05	0.02	100		100% COAL, HEAVY DULL	
261.06	0.01	100		100% MUDSTONE	BROWN.
261.20	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
261.35	0.15	100		100% MUDSTONE	DARK GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
261.63	0.28	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, VERY WEAK ROCK.
261.80	0.17	100		100% CARBONACEOUS SHALE	
261.83	0.03	100		100% MUDSTONE	BROWN.
261.98	0.15	100		100% CARBONACEOUS SHALE	
262.05	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
262.28	0.23	100		100% CARBONACEOUS SHALE	
262.40	0.12	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
262.41	0.01	100	1	100% CARBONACEOUS SHALE	
262.43	0.02	100	1	100% COAL, HEAVY DULL	
262.55	0.12	100	1	100% CARBONACEOUS SHALE	
262.69	0.14	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
262.70	0.01	100	1	100% MUDSTONE	BROWN, VERY WEAK ROCK.
262.80	0.10	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
262.85	0.05	100	1	100% MUDSTONE	BROWN.
262.96	0.11	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
263.00	0.04	100	1	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
263.04	0.04	100	1	100% COAL, HEAVY DULL	
263.10	0.06	100	1	100% MUDSTONE	GREY-BROWN.
263.11	0.01	100	1	100% CARBONACEOUS SHALE	
263.18	0.07	100	1	100% COAL, HEAVY DULL	
263.66	0.48	100	1	100% COAL, DULL	HEAVY DULL COAL, LENSES.
263.71	0.05	100	1	100% COAL, HEAVY DULL	
263.85	0.14	100	1	100% CARBONACEOUS SHALE	MUDSTONE, LENSES.
263.94	0.09	100	1	100% COAL, HEAVY DULL	
264.00	0.06	100	1	100% MUDSTONE	CARBONACEOUS, GREY.
264.15	0.15	100	1	100% COAL, HEAVY DULL	STRONG ROCK.
264.22	0.07	100	1	100% MUDSTONE	CARBONACEOUS, GREY.
264.27	0.05	100	1	100% COAL, HEAVY DULL	
264.33	0.06	100	1	100% CARBONACEOUS SHALE	
264.38	0.05	100	1	100% MUDSTONE	BROWN.
264.44	0.06	100	1	100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
264.49	0.05	100	1	100% MUDSTONE	BROWN.
264.60	0.11	100	1	100% COAL, HEAVY DULL	CARBONACEOUS, LENSES.
264.80	0.20	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
267.29	2.49	100		100% SHALE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
269.00	1.71	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
271.98	2.98	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
272.50	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
273.57	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
273.74	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
274.50	0.76	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
275.13	0.63	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
275.30	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
275.67	0.37	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.12	1.45	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.19	0.07	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
277.75	0.56	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
277.87	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
278.03	0.16	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
279.23	1.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
280.64	1.41	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
280.90	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
281.20	0.30	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
281.90	0.70	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
283.11	1.21	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
284.15	1.04	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
284.52	0.37	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
288.19	3.67	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
288.33	0.14	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
288.85	0.52	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
288.90	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	
288.91	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
288.95	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
288.99	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
289.04	0.05	100		100% CLAYSTONE	CARBONACEOUS, BROWN, FIRM.
289.20	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
289.21	0.01	100		100% CLAYSTONE	FISSILE, BROWN, FIRM.
				TOP OF : 300.79 M R.L.	
289.29	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.37	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.45	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
289.76	0.31	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
289.84	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
289.88	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
289.98	0.10	0		CORE LOSS	
290.00	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
290.15	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
290.20	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF : THICKNESS= 0.99 M; SAMPLED THICKNESS= 0.00 M	
290.23	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.38	0.15	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
290.45	0.07	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
290.63	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
292.72	2.09	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
293.93	1.21	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LITHIC, LIGHT GREY. GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
294.15	0.22	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
294.43	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.11	0.68	100		70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	BANDS, GREY. LIGHT GREY. WEAK ROCK.
295.44	0.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
295.52	0.08	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
295.60	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
295.67	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
295.71	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
296.35	0.64	100		100% MUDSTONE	SILTSTONE, FISSILE, GREY, VERY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
296.50	0.15	100		100% MUDSTONE	FISSILE, CALCITIC, GREY, VERY WEAK ROCK.
296.59	0.09	100		100% MUDSTONE	FISSILE, SILTSTONE, GREY, VERY WEAK ROCK.
296.62	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
297.56	0.94	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
298.06	0.50	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, WEAK ROCK.
299.55	1.49	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
300.24	0.69	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
300.80	0.56	100		100% SILTSTONE	MICACEOUS, GREY, MODERATELY WEAK ROCK.
303.49	2.69	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	ARENACEOUS, LAMINAE, GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK.
303.51	0.02	100		100% PEBBLE CONGLOMERATE	ARENACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
303.55	0.04	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
303.59	0.04	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
305.00	1.41	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
305.50	0.50	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
306.32	0.82	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
309.96	3.64	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF DALMAYNE D UPPER : 280.04 M R.L.	
310.05	0.09	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
310.17	0.12	100	2	100% COAL, HEAVY DULL	STRONG ROCK.
310.20	0.03	100	2	100% COAL, DULL	
310.39	0.19	100	2	100% COAL, HEAVY DULL	
310.46	0.07	100	2	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
310.71	0.25	100	2	100% COAL, DULL	STRONGLY FRAGMENTED.
310.86	0.15	100	2	100% COAL, HEAVY DULL	STRONGLY FRAGMENTED.
311.06	0.20	100	2	100% COAL, DULL	STRONGLY FRAGMENTED.
311.09	0.03	100	2	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
311.23	0.14	100	2	100% COAL, DULL	
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.27 M; SAMPLED THICKNESS= 1.27 M	
311.48	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
311.62	0.14	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS.
311.83	0.21	100		100% SILTSTONE	LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.
312.25	0.42	100		100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
312.86	0.61	100		100% SILTSTONE	MICACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
312.91	0.05	100		100% SHALE	GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
313.02	0.11	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
314.17	1.15	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
315.12	0.95	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
315.57	0.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
316.16	0.59	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
316.47	0.31	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
317.51	1.04	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
317.85	0.34	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
318.00	0.15	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
318.96	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.26	0.30	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
319.66	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
319.85	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
321.34	1.49	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
321.62	0.28	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.
322.81	1.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
323.27	0.46	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
324.20	0.93	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
324.32	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
324.64	0.32	100		100% SANDSTONE,MEDIUM GRAINED	FISSILE, LITHIC, LIGHT GREY, WEAK ROCK.
324.75	0.11	100	3	100% COAL, DULL	
324.78	0.03	100	3	100% COAL, HEAVY DULL	
324.86	0.08	100	3	100% COAL, DULL	HEAVY DULL COAL, LENSES, STRONG ROCK.
325.02	0.16	100	3	100% MUDSTONE	COALY, LENSES, BLACK, MODERATELY WEAK ROCK.
325.05	0.03	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.07	0.02	100	3	100% COAL, BRIGHT	
325.17	0.10	100	3	100% COAL, HEAVY DULL	STRONG ROCK.
325.19	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
325.28	0.09	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.30	0.02	100	3	100% CARBONACEOUS SHALE	BLACK.
325.63	0.33	0	3	CORE LOSS	
325.73	0.10	100	3	100% MUDSTONE	FRAGMENTED, CARBONACEOUS, GREY.
325.77	0.04	100	3	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
325.91	0.14	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
325.97	0.06	100	3	100% MUDSTONE	CARBONACEOUS, FRAGMENTED, BLACK.
				TOP OF DALMAYNE D LOWER : 264.03 M R.L.	
326.03	0.06	100	4	100% COAL, DULL	FRAGMENTED.
326.04	0.01	100	4	100% COAL, DULL	
326.06	0.02	100	4	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
326.07	0.01	100	4	100% COAL, HEAVY DULL	
326.39	0.32	100	4	100% COAL, DULL	
326.40	0.01	100	4	100% MUDSTONE	GREY.
327.40	1.00	100	4	100% COAL, DULL	
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.45 M; SAMPLED THICKNESS= 1.43 M	
327.86	0.46	100		100% MUDSTONE	FRAGMENTED, GREY, MODERATELY WEAK ROCK.
328.12	0.26	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, WEAK ROCK.
328.94	0.82	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, MICACEOUS, LIGHT BROWN, WEAK ROCK.
328.97	0.03	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
329.85	0.88	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
332.68	2.83	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK.
333.19	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
333.22	0.03	100		100% SANDSTONE,MEDIUM GRAINED	FISSILE, MICACEOUS, GREY, VERY WEAK ROCK.
333.25	0.03	100		100% CALCITE	ARENACEOUS, CREAM, MODERATELY WEAK ROCK.
333.53	0.28	100		100% SANDSTONE	CALCITIC, MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
333.58	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY-GREEN, VERY WEAK ROCK.
333.62	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
333.86	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
334.43	0.57	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
334.52	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
334.64	0.12	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
335.82	1.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
336.01	0.19	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
336.97	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
339.14	2.17	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
340.17	1.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
340.27	0.10	100		100% SANDSTONE,FINE GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.00	0.73	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.60	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.86	0.26	100		100% SANDSTONE	PEBBLY, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
343.70	1.84	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
346.47	2.77	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
346.55	0.08	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
347.43	0.88	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.24	0.81	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
	4.90	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
353.49	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
353.58	0.03	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK.
353.65	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
354.49	0.84	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, WEAK ROCK, LAMINATED, WITH CROSS LAMINATION.
354.51	0.02	100		100% COAL, HEAVY DULL	
354.55	0.04	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK, WITH PLANT REMAINS.
356.50	1.95	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
356.71	0.21	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
357.07	0.36	100		100% SILTSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK, WITH PLANT REMAINS.
357.49	0.42	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
362.88	5.39	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
363.55	0.67	100		100% SILTSTONE	GREY, WEAK ROCK, LAMINATED, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
364.86	1.31	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
365.00	0.14	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY STRONG ROCK.
365.04	0.04	100		100% COAL, HEAVY DULL	
365.35	0.31	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
365.52	0.17	100		100% SILTSTONE	CARBONACEOUS, GREY, WEAK ROCK.
366.14	0.62	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WITH MICA, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
366.29	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
366.39	0.10	100		50% SILTSTONE 50% MUDSTONE	GREY. CARBONACEOUS, DARK BROWN. WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
366.67	0.28	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
366.74	0.07	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
366.94	0.20	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
367.37	0.43	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
367.95	0.58	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
369.13	1.18	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
370.07	0.94	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
370.14	0.07	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
370.18	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, VERY WEAK ROCK.
370.21	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
370.24	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
370.36	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
370.57	0.21	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
370.72	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
371.08	0.36	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
371.18	0.10	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK.
371.30	0.12	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN-BLACK, MODERATELY WEAK ROCK.
371.42	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
371.46	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
371.52	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK, WITH PLANT REMAINS.
			TOP OF DALMAYNE E : 218.48 M R.L.		
371.56	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
371.60	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
			BASE OF DALMAYNE E : THICKNESS= 0.08 M; SAMPLED THICKNESS= 0.00 M		
371.78	0.18	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
372.14	0.36	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS, LAMINATED.
372.36	0.22	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
372.75	0.39	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
373.37	0.62	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
373.56	0.19	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
373.84	0.28	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
374.93	1.09	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
375.01	0.08	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
376.93	1.92	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
377.07	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
377.10	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
377.57	0.47	100		100% SILTSTONE	GREY, WITH MICA, MODERATELY WEAK ROCK, LAMINATED.
377.64	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
377.67	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
378.25	0.58	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
378.57	0.32	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. LIGHT GREY. WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
379.32	0.75	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
379.55	0.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
379.80	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
379.82	0.02	100		100% CLAYSTONE	CARBONACEOUS, BADLY BROKEN, BROWN, SOFT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
379.95	0.13	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
380.07	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
380.11	0.04	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.
380.31	0.20	100		100% CARBONACEOUS SHALE	BLACK.
380.33	0.02	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
380.35	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
		TOP OF	DALMAYNE E2 : 209.65 M R.L.		
380.74	0.39	100	5	100% COAL, HEAVY DULL	DULL COAL, LENSES, STRONG ROCK.
380.76	0.02	100	5	100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY STRONG ROCK.
380.78	0.02	100	5	100% CARBONACEOUS SHALE	BLACK.
380.82	0.04	100	5	100% COAL, HEAVY DULL	STRONG ROCK.
380.83	0.01	100	5	100% COAL, BRIGHT	WEAK ROCK.
381.01	0.18	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, STRONG ROCK.
381.02	0.01	100	5	100% CARBONACEOUS SHALE	BLACK.
381.05	0.03	100	5	100% COAL, INTERBANDED DULL AND BRIGHT	
381.08	0.03	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
381.23	0.15	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES, STRONG ROCK.
381.24	0.01	100	5	100% CARBONACEOUS SHALE	BLACK.
		BASE OF	DALMAYNE E2 : THICKNESS= 0.89 M; SAMPLED THICKNESS= 0.89 M		
381.29	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
381.31	0.02	100		100% CLAYSTONE	FISSILE, BROWN, VERY WEAK ROCK.
381.32	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
381.34	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
381.37	0.03	100		100% SILTSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
382.84	1.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
383.23	0.39	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
385.29	2.06	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
385.34	0.05	100		100% SANDSTONE,FINE GRAINED	FISSILE, LITHIC, LIGHT GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
385.84	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
386.13	0.29	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
386.79	0.66	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
387.01	0.22	100		100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
388.00	0.99	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
388.96	0.96	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
390.65	1.69	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
392.84	2.19	100		100% SILTSTONE	GREY, LAMINATED, WITH PLANT REMAINS.
393.02	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
393.22	0.20	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
393.46	0.24	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
393.82	0.36	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.
394.53	0.71	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
394.64	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
394.72	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
394.78	0.06	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK, VERY WEAK ROCK, WITH PLANT REMAINS.
394.96	0.18	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK.
395.06	0.10	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
395.50	0.44	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	BANDS, LIGHT GREY. CARBONACEOUS, SILTSTONE, DARK BROWN. WEAK ROCK.
395.51	0.01	100		100% COAL, BRIGHT	
395.95	0.44	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. CARBONACEOUS, STREAKS, LIGHT GREY. WEAK ROCK, WITH PLANT REMAINS, LAMINATED.
396.77	0.82	100		100% SILTSTONE	GREY, WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
396.89	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
396.93	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
396.98	0.05	100		100% COAL, HEAVY DULL	
397.01	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, FIRM.
397.11	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
397.21	0.10	50		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
397.49	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
397.71	0.22	50		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK.
397.79	0.08	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
398.00	0.21	40		100% MUDSTONE	CARBONACEOUS, DARK BROWN, VERY WEAK ROCK.
398.25	0.25	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
398.89	0.64	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, SILTSTONE, DARK BROWN. WEAK ROCK, LAMINATED.
399.15	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
399.50	0.35	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
399.56	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
400.45	0.89	100		100% SILTSTONE	MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
400.51	0.06	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.
400.53	0.02	100		100% CLAY	CARBONACEOUS, DARK GREY, SOFT.
401.25	0.72	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
401.27	0.02	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
402.08	0.81	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
402.52	0.44	100		100% SILTSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
402.56	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
402.64	0.08	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
402.80	0.16	100		100% MUDSTONE	CARBONACEOUS, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
403.42	0.62	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, MODERATELY WEAK ROCK.
403.75	0.33	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
403.92	0.17	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN, WEAK ROCK.
404.37	0.45	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
404.41	0.04	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK BROWN.
404.51	0.10	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
407.51	3.00	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
407.52	0.01	100		100% COAL, BRIGHT	
408.01	0.49	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK.
408.12	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
408.26	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
408.58	0.32	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
409.60	1.02	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK.
409.80	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
411.92	2.12	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT BROWN, MODERATELY WEAK ROCK.
412.05	0.13	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
413.93	1.88	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT BROWN, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
414.27	0.34	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
415.52	1.25	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
417.80	2.28	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
420.67	2.87	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
420.84	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
420.99	0.15	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
421.18	0.19	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
421.43	0.25	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
421.52	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-BROWN, MODERATELY WEAK ROCK.
421.56	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
422.10	0.54	100		100% SILTSTONE	LIGHT BROWN, WEAK ROCK.
422.13	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
422.22	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
422.56	0.34	100		60% SANDSTONE 40% SILTSTONE	COALY, LENSES, GREY-GREEN. GREY. WEAK ROCK.
423.26	0.70	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK, THINLY BEDDED.
423.42	0.16	100		100% SANDSTONE	PEBBLY, COALY, GREY-GREEN, MODERATELY WEAK ROCK.
424.83	1.41	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
425.24	0.41	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
426.29	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
426.44	0.15	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, MODERATELY WEAK ROCK.
427.46	1.02	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
428.55	1.09	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
433.92	5.37	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY-GREEN, MODERATELY WEAK ROCK.
434.15	0.23	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, WEAK ROCK, WITH MUD PELLETS.
437.71	3.56	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, WITH PLANT REMAINS.
437.99	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
438.91	0.92	100		55% SILTSTONE 45% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. CARBONACEOUS, STREAKS, GREY-GREEN. WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, WITH CROSS LAMINATION.
439.18	0.27	100		100% SILTSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS.
439.46	0.28	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, WITH PLANT REMAINS.
439.80	0.34	100		100% MUDSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK.
441.10	1.30	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREEN, WITH MICA, WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
441.41	0.31	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
441.81	0.40	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
441.92	0.11	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
442.67	0.75	100		100% SILTSTONE	GREY-GREEN, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
442.84	0.17	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
442.91	0.07	100		100% COAL, HEAVY DULL	BADLY BROKEN.
444.88	1.97	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREEN, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
446.00	1.12	100		60% SILTSTONE 40% SANDSTONE	GREY-GREEN. MED.-FINE GRAINED, LIGHT GREEN. MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, TIGHT NON PLANAR, .
446.26	0.26	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
447.00	0.74	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
447.36	0.36	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
447.86	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
448.17	0.31	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
449.00	0.83	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK.
450.63	1.63	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
453.58	2.95	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
454.53	0.95	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, ARGILLACEOUS, GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
458.68	4.15	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREEN, WEAK ROCK.
467.30	8.62	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
467.40	0.10	100		100% MUDSTONE	CALCITIC, FISSILE, GREY, FIRM.
470.45	3.05	100		100% SILTSTONE	GREY-BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
473.00	2.55	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DC1	0.00 M	289.21 - 290.20 M	0.99 M
DDU	1.27 M	309.96 - 311.23 M	1.27 M
DDL	1.43 M	325.97 - 327.40 M	1.43 M
DE	0.00 M	371.52 - 371.60 M	0.08 M
DE2	0.89 M	380.35 - 381.24 M	0.89 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	262.40 - 264.60 M	2.20 M
2	309.96 - 311.23 M	1.27 M
3	324.64 - 325.97 M	1.33 M
4	325.97 - 327.40 M	1.43 M
5	380.35 - 381.24 M	0.89 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 12

HOLE TYPE	CORE	
EASTING	600,000 M	GRID
NORTHING	5,387,300 M	GRID
ELEVATION	565.00 M	
TOTAL DEPTH DRILLED	517.00 M	
DRILLING STARTED	5/10/78	
DRILLING TIME	49 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	0.30 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
10.50	10.50	100		100% DOLERITE	GREY-GREEN, MODERATELY WEATHERED.
14.50	4.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
24.00	9.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY WEATHERED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
26.50	2.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
29.60	3.10	100		100% DOLERITE	BADLY BROKEN, GREY-GREEN, SLIGHTLY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
31.00	1.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED.
34.00	3.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
40.50	6.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
48.00	7.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
58.10	10.10	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, WIDELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.00	0.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
61.40	2.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
70.45	9.05	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
72.00	1.55	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
73.30	1.30	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.00	5.70	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
85.90	6.90	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
107.00	21.10	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, UNWEATHERED, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT NON PLANAR, INFILLED WITH CLAY & TALC.
155.00	48.00	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, UNWEATHERED, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
169.30	14.30	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, UNWEATHERED, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
174.30	5.00	100		100% DOLERITE	FINE GRAINED, GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH QUARTZ.
178.00	3.70	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
190.50	12.50	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
207.52	17.02	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, UNWEATHERED, EXTREMELY SRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
207.95	0.43	100		100% DOLERITE	VERY FINE GRAINED, GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
208.06	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
208.56	0.50	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
208.90	0.34	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
209.08	0.18	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
209.45	0.37	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
209.53	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
210.03	0.50	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
210.76	0.73	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
211.18	0.42	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
212.40	1.22	80		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
212.95	0.55	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
215.70	2.75	80		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
215.77	0.07	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK.
216.15	0.38	100		100% MUDSTONE	CLAYSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK.
217.58	1.43	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
219.37	1.79	100		100% SANDSTONE,COARSE GRAINED	COALY, BANDS, GREY, MODERATELY WEAK ROCK.
219.52	0.15	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
219.87	0.35	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
219.99	0.12	100		100% SANDSTONE,COARSE GRAINED	CONGLOMERATIC, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
220.39	0.40	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
220.42	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
220.55	0.13	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
220.60	0.05	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
220.84	0.24	100		90% MUDSTONE 10% COAL, BRIGHT	CARBONACEOUS, BROWN-BLACK. MODERATELY STRONG ROCK, THINLY LAMINATED.
221.49	0.65	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
222.47	0.98	100		100% SANDSTONE,FINE GRAINED	CONGLOMERATIC, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
223.95	1.48	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
229.41	5.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
232.41	3.00	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
233.57	1.16	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
233.82	0.25	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH DISTURBED BEDDING.
234.49	0.67	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
235.93	1.44	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	SILTSTONE, GREY-BROWN. BANDS, LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
236.26	0.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
236.96	0.70	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
238.20	1.24	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
238.85	0.65	100		100% SANDSTONE	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
239.00	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
239.14	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
239.22	0.08	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, WEAK ROCK.
239.30	0.08	100		100% MUDSTONE	BRIGHT COAL, STREAKS, DARK GREY, MODERATELY WEAK ROCK.
239.39	0.09	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, WEAK ROCK.
239.48	0.09	100		100% MUDSTONE	COALY, STREAKS, DARK BROWN, WEAK ROCK.
240.12	0.64	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY, WEAK ROCK, WITH DISTURBED BEDDING.
240.15	0.03	100		100% COAL, HEAVY DULL	
240.22	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
240.25	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
240.30	0.05	100		100% COAL, HEAVY DULL	
240.33	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
240.34	0.01	100		100% MUDSTONE	LIGHT BROWN.
240.51	0.17	100		100% COAL, HEAVY DULL	
240.53	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
240.56	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
240.58	0.02	100		100% MUDSTONE	CARBONACEOUS, PELLETAL, BROWN-BLACK, MODERATELY STRONG ROCK.
240.59	0.01	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY STRONG ROCK.
240.66	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
240.67	0.01	100		100% CLAYSTONE	BROWN, MODERATELY WEAK ROCK.
240.69	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
240.75	0.06	100		100% CLAYSTONE	MUDSTONE, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
240.77	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
241.05	0.28	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
241.08	0.03	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, MODERATELY WEAK ROCK.
241.35	0.27	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
241.37	0.02	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
241.39	0.02	100		100% COAL, HEAVY DULL	
241.40	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.41	0.01	100		100% SANDSTONE	ARGILLACEOUS, PELLETAL, LIGHT BROWN, MODERATELY WEAK ROCK.
241.44	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.47	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.56	0.09	100		100% COAL, HEAVY DULL	
241.60	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN.
241.63	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
241.64	0.01	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
241.65	0.01	100		100% COAL, DULL	
241.66	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.71	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
241.76	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.78	0.02	100		100% CLAYSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
241.79	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
241.83	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
241.84	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.85	0.01	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
241.87	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
241.88	0.01	100		100% COAL, HEAVY DULL	
241.89	0.01	100		100% COAL, BRIGHT	
241.92	0.03	100		100% COAL, HEAVY DULL	
241.94	0.02	100		100% COAL, BRIGHT	
241.96	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
242.02	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
242.13	0.11	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
242.16	0.03	100		100% COAL, HEAVY DULL	
242.18	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
242.19	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
242.25	0.06	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
242.48	0.23	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
242.56	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
242.57	0.01	100		100% COAL, BRIGHT	
242.59	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
242.69	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
242.77	0.08	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
242.83	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
242.86	0.03	100		100% COAL, HEAVY DULL	
242.88	0.02	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
242.91	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
242.96	0.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
242.99	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
243.06	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.32	0.26	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
244.15	0.83	100		100% SILTSTONE	MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
244.37	0.22	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
244.45	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
244.69	0.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, WEAK ROCK.
244.81	0.12	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, WEAK ROCK.
245.01	0.20	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN, WEAK ROCK.
245.11	0.10	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
245.14	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
245.22	0.08	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
247.35	2.13	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
247.62	0.27	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	ARENACEOUS, LAMINAE, GREY. SILTSTONE, LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK.
248.09	0.47	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
248.23	0.14	100		100% MUDSTONE	CARBONACEOUS, COALY, DARK BROWN, MODERATELY WEAK ROCK.
248.44	0.21	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK.
248.56	0.12	100		100% CLAYSTONE	BADLY BROKEN, LIGHT GREEN, VERY WEAK ROCK.
249.22	0.66	100		100% CLAYSTONE	FISSILE, BANDS, LIGHT GREEN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
249.52	0.30	100		100% CLAYSTONE	BANDS, LIGHT GREEN, WEAK ROCK, THINLY BEDDED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
250.64	1.12	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
250.67	0.03	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
251.76	1.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
252.06	0.30	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	BANDS, LIGHT GREY. BANDS, GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
252.22	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
252.35	0.13	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
252.63	0.28	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
254.32	1.69	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
256.68	2.36	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
256.74	0.06	100		100% CLAYSTONE	LIGHT GREEN, FIRM.
258.13	1.39	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
258.66	0.53	100		100% SANDSTONE	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
260.54	1.88	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MEDIUM BEDDED.
261.12	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
261.39	0.27	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
262.15	0.76	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
262.48	0.33	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
262.69	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
262.76	0.07	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
263.14	0.38	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
263.62	0.48	100		100% MUDSTONE	ARENACEOUS, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH PARTING LINEATION, WITH DISTURBED BEDDING.
264.32	0.70	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS.
264.54	0.22	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
264.68	0.14	100		100% CLAYSTONE	FISSILE, BANDS, LIGHT GREEN, VERY WEAK ROCK.
264.71	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
264.76	0.05	100		100% CLAYSTONE	LIGHT GREEN, VERY WEAK ROCK.
264.84	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
264.85	0.01	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
264.88	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
265.16	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
265.37	0.21	100		100% SANDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
265.80	0.43	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY STRONG ROCK.
269.48	3.68	100		100% SANDSTONE,MEDIUM GRAINED	SILICEOUS, LIGHT GREY, MODERATELY STRONG ROCK, MEDIUM BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
269.82	0.34	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, FISSILE, LIGHT GREEN, WITH MICA, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
269.88	0.06	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
271.42	1.54	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
271.68	0.26	100		100% MUDSTONE	SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
271.73	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
271.90	0.17	100		100% CLAYSTONE	ARENACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
272.23	0.33	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
272.26	0.03	100		100% COAL, HEAVY DULL	
272.32	0.06	100		100% COAL, INTERBANDED DULL AND BRIGHT	
272.35	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
272.38	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
272.39	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
272.41	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
272.43	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
272.51	0.08	100		100% MUDSTONE	ARGILLACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
272.62	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
272.72	0.10	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
273.32	0.60	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
273.69	0.37	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
274.15	0.46	100		100% SILTSTONE	CALCITIC, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
274.24	0.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
275.15	0.91	100		100% CLAYSTONE	SILTSTONE, BANDS, GREY-GREEN, WEAK ROCK.
275.52	0.37	100		100% SILTSTONE	ARGILLACEOUS, GREY, MODERATELY WEAK ROCK.
275.97	0.45	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
276.90	0.93	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
281.00	4.10	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
281.90	0.90	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION.
282.38	0.48	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
282.63	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
283.08	0.45	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
285.35	2.27	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
286.75	1.40	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
287.07	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
289.55	2.48	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
291.00	1.45	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
291.79	0.79	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
292.29	0.50	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
292.36	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
292.45	0.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
294.71	2.26	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF DALMAYNE B : 270.29 M R.L.	
294.75	0.04	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
294.77	0.02	100	1	100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK, SLOW SLAKING, MODERATELY STICKY.
294.87	0.10	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
295.24	0.37	100	1	80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BLACK. CARBONACEOUS, SILTSTONE, GREY-BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
295.39	0.15	100	1	100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, WEAK ROCK, NON STICKY.
295.41	0.02	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
295.44	0.03	100	2	100% COAL, HEAVY DULL	
295.45	0.01	100	2	100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
295.57	0.12	100	2	100% COAL, HEAVY DULL	
295.63	0.06	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
295.69	0.06	100	2	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, SLOW SLAKING, MODERATELY STICKY.
295.73	0.04	100	2	100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
296.07	0.34	100	2	100% COAL, HEAVY DULL	MUDSTONE, LAMINAE.
296.10	0.03	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
296.12	0.02	100	2	100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
296.31	0.19	100	2	100% COAL, HEAVY DULL	MUDSTONE, LAMINAE.
296.38	0.07	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
296.42	0.04	100	2	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, NON SLAKING, NON STICKY.
296.44	0.02	100	2	100% CLAYSTONE	LIGHT BROWN, FIRM, RAPID SLAKING, MODERATELY STICKY.
296.53	0.09	100	2	60% MUDSTONE 40% MUDSTONE	LIGHT BROWN. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
296.58	0.05	100	2	100% COAL, HEAVY DULL	
296.61	0.03	100	2	100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
296.64	0.03	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
296.67	0.03	100	2	100% COAL, BRIGHT WITH FEW DULL BANDS	
296.68	0.01	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
296.78	0.10	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
296.79	0.01	100	2	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
296.91	0.12	100	2	100% COAL, HEAVY DULL	
296.93	0.02	100	2	100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, VERY WEAK ROCK, SLOW SLAKING, MODERATELY STICKY.
297.01	0.08	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
297.04	0.03	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
297.08	0.04	100	2	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
297.11	0.03	100	2	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
297.24	0.13	100	2	100% COAL, HEAVY DULL	MUDSTONE, LENSES.
297.25	0.01	100	2	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
297.34	0.09	100	2	100% COAL, HEAVY DULL	
297.36	0.02	100	2	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
297.44	0.08	100	2	100% MUDSTONE	BRIGHT COAL, LENSES, BROWN-BLACK, MODERATELY WEAK ROCK.
297.50	0.06	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
297.60	0.10	100	2	100% COAL, HEAVY DULL	
297.62	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
297.65	0.03	100	3	100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
297.67	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
297.68	0.01	100	3	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
297.74	0.06	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
297.84	0.10	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
297.87	0.03	100	3	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
297.89	0.02	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
297.91	0.02	100	3	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
297.95	0.04	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
298.01	0.06	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
298.07	0.06	100	3	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
298.15	0.08	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
298.18	0.03	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
298.22	0.04	100	3	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
298.30	0.08	100	3	70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
298.34	0.04	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
298.38	0.04	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
298.45	0.07	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
298.48	0.03	100	3	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
298.65	0.17	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
298.75	0.10	100	3	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, SLOW SLAKING, NON STICKY.
298.77	0.02	100	3	100% MUDSTONE	BROWN, WEAK ROCK, SLOW SLAKING, NON STICKY.
298.95	0.18	100	3	70% MUDSTONE 30% MUDSTONE	LIGHT BROWN. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
299.10	0.15	100	3	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
299.13	0.03	100	3	100% MUDSTONE	LIGHT BROWN, WEAK ROCK, LAMINATED.
299.27	0.14	100	4	100% MUDSTONE	CARBONACEOUS, DARK BROWN.
299.33	0.06	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
299.44	0.11	100	4	100% CARBONACEOUS MUDSTONE	FISSILE, BROWN-BLACK, STIFF, RAPID SLAKING, VERY STICKY.
299.54	0.10	100	4	100% CARBONACEOUS MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
299.58	0.04	100	4	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
299.66	0.08	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
299.69	0.03	100	4	100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
299.77	0.08	100	4	100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
299.78	0.01	100	4	100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
299.80	0.02	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
299.83	0.03	100	4	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
299.99	0.16	100	4	100% MUDSTONE	ARENACEOUS, MICACEOUS, LIGHT BROWN, WEAK ROCK.
300.39	0.40	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
300.42	0.03	100	4	100% MUDSTONE	BROWN, WEAK ROCK.
300.55	0.13	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
300.61	0.06	100	4	100% COAL, HEAVY DULL	
300.63	0.02	100	4	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
300.72	0.09	100	4	100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
300.87	0.15	100	4	70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BLACK. BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH LOAD CASTS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
300.91	0.04	100	5	100% COAL, HEAVY DULL	
301.25	0.34	100	5	100% CARBONACEOUS SHALE	MUDSTONE, LAMINAE.
301.34	0.09	100	5	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
301.35	0.01	100	5	100% COAL, BRIGHT	
301.48	0.13	100	5	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
301.56	0.08	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
301.62	0.06	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE B : THICKNESS= 6.91 M; SAMPLED THICKNESS= 6.91 M			
301.81	0.19	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
302.20	0.39	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL.
302.90	0.70	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
303.05	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
303.15	0.10	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
304.22	1.07	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
304.30	0.08	100		100% CLAYSTONE	LIGHT BROWN, STIFF, RAPID SLAKING.
307.54	3.24	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
310.32	2.78	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
311.93	1.61	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
314.29	2.36	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE C : 250.71 M R.L.	
314.92	0.63	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
314.93	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
315.02	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
315.43	0.41	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, ARENACEOUS, BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
315.57	0.14	100		100% MUDSTONE	LIGHT BROWN, STIFF, RAPID SLAKING, VERY STICKY.
315.95	0.38	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
316.05	0.10	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES, SLOW SLAKING, MODERATELY STICKY.
316.19	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
316.50	0.31	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BROWN. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH MUD PELLETS.
316.70	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
316.74	0.04	100		100% MUDSTONE	BLUE-GREY, STIFF, RAPID SLAKING.
316.79	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
317.00	0.21	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
317.20	0.20	0		CORE LOSS	
317.22	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
317.31	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
317.34	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
317.46	0.12	100		100% MUDSTONE	BROWN-BLACK, MODERATELY WEAK ROCK.
317.51	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
317.57	0.06	100		100% COAL, HEAVY DULL	
317.60	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
317.71	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
317.73	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
317.79	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
317.93	0.14	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
318.00	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
318.23	0.23	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
318.38	0.15	100		100% COAL, HEAVY DULL	
318.40	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
318.44	0.04	100		100% COAL, HEAVY DULL	
318.45	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
318.52	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
318.55	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
318.65	0.10	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
318.84	0.19	100		100% COAL, HEAVY DULL	
318.88	0.04	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
318.89	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
318.91	0.02	100		100% MUDSTONE	BUFF, STIFF.
319.12	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
319.20	0.08	100		50% COAL, BRIGHT 50% MUDSTONE	CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THINLY LAMINATED.
319.28	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
319.45	0.17	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
322.64	3.19	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.

BASE OF DALMAYNE C : THICKNESS= 8.35 M; SAMPLED THICKNESS= 0.00 M

328.12	5.48	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT.
329.64	1.52	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL.
329.77	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
330.24	0.47	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT EROSIONAL.
331.19	0.95	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
331.29	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
331.71	0.42	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
331.84	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
331.89	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
332.06	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
332.42	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
334.70	2.28	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
334.84	0.14	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK.
335.51	0.67	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
336.68	1.17	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT EROSIONAL, BEDS DIP 5 DEG., WITH PLANT REMAINS.
336.79	0.11	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
338.44	1.65	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
341.94	3.50	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
346.66	4.72	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
348.81	2.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
350.82	2.01	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
351.77	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
352.80	1.03	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
353.28	0.48	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
353.57	0.29	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
353.61	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
353.75	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
353.84	0.09	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
353.98	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE.
359.34	5.36	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
361.70	2.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
363.67	1.97	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
364.69	1.02	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
364.77	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
366.23	1.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
367.89	1.66	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
370.49	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
370.88	0.39	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
371.05	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
371.37	0.32	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
372.97	1.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
372.98	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
373.68	0.70	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED, WITH CARBONACEOUS WISPS.
373.77	0.09	100		100% SILTSTONE	COALY, LENSES, GREY, WEAK ROCK.
374.20	0.43	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
374.25	0.05	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
374.26	0.01	100		100% CLAYSTONE	COALY, LENSES, BUFF, VERY WEAK ROCK.
374.28	0.02	100	6	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
374.65	0.37	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
374.66	0.01	100	6	100% COAL, BRIGHT	
374.67	0.01	100	6	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
374.69	0.02	100	6	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
374.78	0.09	100	6	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
374.92	0.14	100	6	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
375.02	0.10	100	6	100% MUDSTONE	FISSILE, GREY, VERY WEAK ROCK.
375.32	0.30	100	6	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
375.45	0.13	100	6	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK.
375.67	0.22	100	7	100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
375.87	0.20	100	7	100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
375.98	0.11	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	
376.01	0.03	100	7	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
376.65	0.64	100	7	100% MUDSTONE	BRIGHT COAL, LENSES, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
376.76	0.11	100	7	100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK, WITH LOAD CASTS.
376.78	0.02	100	7	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE D : 188.22 M R.L.		
376.80	0.02	100	8	100% COAL, HEAVY DULL	
376.81	0.01	100	8	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
377.22	0.41	100	8	100% COAL, DULL WITH FEW BRIGHT BANDS	
377.25	0.03	100	8	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
377.52	0.27	100	8	100% COAL, DULL	
377.88	0.36	100	8	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
377.90	0.02	100	8	100% MUDSTONE	CARBONACEOUS, TRACES, BROWN, MODERATELY WEAK ROCK.
377.92	0.02	100	8	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
378.64	0.72	100	8	100% COAL, DULL WITH FEW BRIGHT BANDS	
378.69	0.05	100	9	100% MUDSTONE	COALY, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK.
378.73	0.04	100	9	100% MUDSTONE	BRIGHT COAL, LAMINAE, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
378.96	0.23	100	9	100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
379.21	0.25	100	9	100% COAL, DULL	
379.27	0.06	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
379.29	0.02	100	9	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
379.30	0.01	100	9	100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
379.33	0.03	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
379.38	0.05	100	9	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
380.01	0.63	100	10	100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
380.12	0.11	100	10	100% MUDSTONE	BROWN, WEAK ROCK.
380.17	0.05	100	10	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
380.18	0.01	100	10	100% MUDSTONE	SHALY, GREY, WEAK ROCK.
380.21	0.03	100	10	100% MUDSTONE	ARENACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
380.31	0.10	100	10	100% CARBONACEOUS SHALE	COALY, BANDS, DARK BROWN, WEAK ROCK.
380.39	0.08	100	11	100% COAL, HEAVY DULL	
380.40	0.01	100	11	100% MUDSTONE	ARENACEOUS, BROWN, MODERATELY WEAK ROCK.
380.60	0.20	100	11	100% COAL, HEAVY DULL	
380.80	0.20	100	11	100% COAL, DULL	CARBONACEOUS, BANDS.
381.52	0.72	100	11	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE D : THICKNESS= 4.74 M; SAMPLED THICKNESS= 4.74 M	
381.60	0.08	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
381.65	0.05	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
381.79	0.14	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
384.53	2.74	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
384.81	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
414.56	29.75	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
414.58	0.02	100		100% COAL, HEAVY DULL	
414.59	0.01	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
414.71	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
416.09	1.38	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
421.52	5.43	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
421.59	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
421.61	0.02	100		100% CLAYSTONE	BROWN, VERY WEAK ROCK.
421.68	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
422.18	0.50	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
422.26	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
422.98	0.72	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
423.64	0.66	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, LAMINATED.
423.76	0.12	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
423.86	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
424.48	0.62	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
424.54	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
424.79	0.25	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
425.04	0.25	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
425.60	0.56	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
426.13	0.53	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
426.43	0.30	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
426.98	0.55	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
427.00	0.02	100		100% COAL, BRIGHT	
427.15	0.15	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
427.59	0.44	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
427.72	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
428.06	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, WHITE, MODERATELY WEAK ROCK.
430.77	2.71	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
431.07	0.30	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
431.64	0.57	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
431.67	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
432.26	0.59	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
432.79	0.53	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
433.21	0.42	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
433.43	0.22	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
434.97	1.54	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
435.62	0.65	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
436.04	0.42	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
436.78	0.74	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
438.17	1.39	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E : 126.83 M R.L.	
438.47	0.30	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
438.51	0.04	100		100% CLAYSTONE	LIGHT BROWN, WITH LENSES OF CALCITE, FIRM, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
438.53	0.02	100		100% COAL, HEAVY DULL	
				BASE OF DALMAYNE E : THICKNESS= 0.36 M; SAMPLED THICKNESS= 0.00 M	
438.64	0.11	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
439.24	0.60	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CARBONACEOUS WISPS.
439.53	0.29	100		100% MUDSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
439.58	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
439.62	0.04	100		100% CLAYSTONE	LIGHT BROWN, FIRM, RAPID SLAKING.
439.70	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
439.74	0.04	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
440.10	0.36	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
441.07	0.97	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CARBONACEOUS WISPS.
443.02	1.95	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
				TOP OF DALMAYNE E2 : 121.98 M R.L.	
443.25	0.23	100	12	100% COAL, DULL	MUDSTONE, LAMINAE, WITH PYRITE.
443.27	0.02	100	12	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
443.29	0.02	100	12	100% COAL, HEAVY DULL	
443.33	0.04	100	12	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
443.34	0.01	100	12	100% COAL, HEAVY DULL	
443.74	0.40	100	12	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE E2 : THICKNESS= 0.72 M; SAMPLED THICKNESS= 0.72 M	
443.90	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
444.31	0.41	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
444.54	0.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
444.89	0.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
446.72	1.83	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
447.58	0.86	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
448.57	0.99	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
448.86	0.29	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
448.91	0.05	100		100% CLAYSTONE	FISSILE, CALCITIC, LIGHT BROWN, FIRM.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
449.00	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
449.25	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
449.31	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
449.62	0.31	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
449.82	0.20	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
450.45	0.63	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
450.92	0.47	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
451.44	0.52	100		70% MUDSTONE 30% SANDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY. COALY, BANDS. MODERATELY WEAK ROCK.
451.94	0.50	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
453.02	1.08	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
454.94	1.92	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
455.01	0.07	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
455.23	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
455.61	0.38	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
457.98	2.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
458.15	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
458.75	0.60	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	SILTSTONE, LAMINAE, GREY-BROWN. CARBONACEOUS, BANDS, BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED, MODERATELY SPACED JOINTS, TIGHT NON PLANAR, .
459.09	0.34	100		100% SANDSTONE	SILTSTONE, BANDS, BROWN, MODERATELY WEAK ROCK.
462.62	3.53	100		100% SANDSTONE	ARGILLACEOUS, MICACEOUS, BROWN, MODERATELY WEAK ROCK.
464.54	1.92	100		100% SANDSTONE	ARGILLACEOUS, MICACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
466.60	2.06	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
467.59	0.99	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
469.45	1.86	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
472.05	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
483.15	11.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
485.00	1.85	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
485.65	0.65	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
485.90	0.25	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
485.99	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
486.04	0.05	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK.
486.07	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
486.58	0.51	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
486.62	0.04	100		100% MUDSTONE	SILTSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
487.25	0.63	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
487.81	0.56	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
488.00	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
489.32	1.32	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
489.54	0.22	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
489.79	0.25	100		100% CLAYSTONE	LIGHT BROWN, SOFT, RAPID SLAKING, VERY STICKY.
489.87	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
490.06	0.19	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
491.56	1.50	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
491.66	0.10	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
491.83	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
491.87	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
492.76	0.89	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
493.14	0.38	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
493.24	0.10	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
493.26	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
493.28	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
493.35	0.07	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
493.39	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	CARBONACEOUS, LAMINAE.
493.57	0.18	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
493.77	0.20	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
493.92	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
493.95	0.03	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
494.20	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
494.28	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
494.32	0.04	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
494.52	0.20	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
494.82	0.30	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
495.94	1.12	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
496.01	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
496.24	0.23	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
496.28	0.04	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
496.39	0.11	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
496.43	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
496.52	0.09	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
496.55	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
496.58	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
496.62	0.04	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEAK ROCK.
496.67	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
496.72	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
497.13	0.41	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
497.22	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEAK ROCK.
497.41	0.19	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
497.56	0.15	100		100% SANDSTONE,FINE GRAINED	CREAM, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
497.87	0.31	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
497.91	0.04	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
497.94	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
500.83	2.89	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. CARBONACEOUS, TRACES, CREAM. MODERATELY WEAK ROCK, THINLY BEDDED.
501.19	0.36	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, CREAM, MODERATELY WEAK ROCK.
501.27	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
501.65	0.38	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, CREAM, MODERATELY WEAK ROCK.
502.41	0.76	100		100% SANDSTONE	VERY COARSE GRAINED, QUARTZOSE, CREAM, MODERATELY STRONG ROCK.
503.70	1.29	100		50% SANDSTONE 50% MUDSTONE	MED.-FINE GRAINED, CREAM. SILTSTONE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
505.00	1.30	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, CREAM, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
506.13	1.13	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	MUDSTONE, LENSES, LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
506.45	0.32	100		100% MUDSTONE	GREY.
506.69	0.24	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. THINLY LAMINATED.
506.94	0.25	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
507.20	0.26	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
507.54	0.34	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, CREAM, MODERATELY WEAK ROCK.
507.81	0.27	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
508.01	0.20	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH BURROWING, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
508.19	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
508.44	0.25	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
508.68	0.24	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
512.37	3.69	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	COALY, LENSES, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
512.59	0.22	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING, WITH BURROWING.
512.78	0.19	100		100% MUDSTONE	ARENACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK.
513.12	0.34	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING.
515.00	1.88	100		100% SILTSTONE	PEBBLY, DARK GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	6.91 M	294.71 - 301.62 M	6.91 M
DC	0.00 M	314.29 - 322.64 M	8.35 M
DD	4.74 M	376.78 - 381.52 M	4.74 M
DE	0.00 M	438.17 - 438.53 M	0.36 M
DE2	0.72 M	443.02 - 443.74 M	0.72 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	294.71 - 295.41 M	0.70 M
2	295.41 - 297.60 M	2.19 M
3	297.60 - 299.13 M	1.53 M
4	299.13 - 300.87 M	1.74 M
5	300.87 - 301.62 M	0.75 M
6	374.26 - 375.45 M	1.19 M
7	375.45 - 376.78 M	1.33 M
8	376.78 - 378.64 M	1.86 M
9	378.64 - 379.38 M	0.74 M
10	379.38 - 380.31 M	0.93 M
11	380.31 - 381.52 M	1.21 M
12	443.02 - 443.74 M	0.72 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 13

HOLE TYPE	CORE	
EASTING	596,100 M	GRID
NORTHING	5,386,800 M	GRID
ELEVATION	685.00 M	
TOTAL DEPTH DRILLED	457.60 M	
DRILLING STARTED	21/10/78	
DRILLING TIME	9 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.55	4.55	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
5.20	0.65	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
24.85	19.65	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 66 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
25.45	0.60	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.50	0.05	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.70	0.20	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
25.73	0.03	100		100% DOLERITE	FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
26.35	0.62	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
41.50	15.15	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
42.50	1.00	100		100% DOLERITE	VERY COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
50.00	7.50	100		100% DOLERITE	COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
76.60	26.60	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
103.60	27.00	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
127.60	24.00	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
171.50	43.90	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
183.00	11.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS AND CLAY ON JOINTS, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
250.00	67.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
252.00	2.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
265.60	13.60	100		100% DOLERITE	MEDIUM GRAINED, GREY, MODERATELY STRONG ROCK.
298.00	32.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
299.00	1.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
307.20	8.20	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
308.60	1.40	100		100% DOLERITE	CHLORITIC, DARK GREEN, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
330.00	21.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
335.60	5.60	100		100% DOLERITE	MED.-COARSE GRAINED, CHLORITIC, GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
351.50	15.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
352.50	1.00	100		100% DOLERITE	MEDIUM GRAINED, CHLORITIC, GREEN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
364.00	11.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
385.00	21.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK, VERY WIDELY SPACED JOINTS.
391.50	6.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
415.60	24.10	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, NON-PLANAR DISCONTINUITIES, .
442.00	26.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS.
457.60	15.60	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH ZEOLITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 14

HOLE TYPE	CORE	
EASTING	597,700 M	GRID
NORTHING	5,385,100 M	GRID
ELEVATION	535.00 M	
TOTAL DEPTH DRILLED	411.09 M	
DRILLING STARTED	23/10/78	
DRILLING TIME	12 DAYS	
CORE SIZE	64.0 MM	
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	0.00 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 14

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
5.50	5.50	0		CORE LOSS	
7.00	1.50	90		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
8.50	1.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
12.00	3.50	80		80% DOLERITE 20% DOLERITE	MEDIUM GRAINED, GREY. MEDIUM GRAINED, FERRUGINOUS, ORANGE-YELLOW. MODERATELY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
14.00	2.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
15.00	1.00	90		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
17.10	2.10	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
19.00	1.90	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
35.00	16.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH ZEOLITE ON JOINTS, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
38.50	3.50	70		80% DOLERITE 20% DOLERITE	MEDIUM GRAINED, FERRUGINOUS, YELLOW-BROWN. MEDIUM GRAINED, GREY. SLIGHTLY WEATHERED, WEAK ROCK.
52.00	13.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
61.00	9.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
80.50	19.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH LIMONITE ON JOINTS, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
81.00	0.50	80		70% TALC 30% DOLERITE	GREEN. MEDIUM GRAINED, STRONGLY FRAGMENTED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.50	8.50	100		100% DOLERITE	MEDIUM GRAINED, FRAGMENTED, GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, UNWEATHERED, STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
124.00	34.50	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, VERY STRONG ROCK, MODERATELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
164.00	40.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS AND CALCITE ON JOINTS, STRONG ROCK, MODERATELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, .
168.00	4.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
170.10	2.10	100		100% DOLERITE	FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, .
170.72	0.62	100		100% DOLERITE	FINE GRAINED, CHLORITIC, GREY-GREEN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE.
170.74	0.02	100		100% SANDSTONE,FINE GRAINED	BAKED, GREY, MODERATELY STRONG ROCK.
172.44	1.70	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
176.30	3.86	100		100% SANDSTONE,COARSE GRAINED	LITHIC, FRIABLE, LIGHT GREY, WEAK ROCK.
176.88	0.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
177.29	0.41	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
177.71	0.42	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
178.10	0.39	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
178.51	0.41	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
180.98	2.47	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE B : 354.02 M R.L.	
181.20	0.22	100	1	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
181.58	0.38	0	1	CORE LOSS	
182.07	0.49	100	1	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
182.16	0.09	100	1	100% MUDSTONE	GREY, WEAK ROCK.
182.41	0.25	100	1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
182.61	0.20	100	2	100% MUDSTONE	GREY, WEAK ROCK.
183.00	0.39	100	2	100% MUDSTONE	LIGHT GREY, VERY WEAK ROCK.
183.27	0.27	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
183.41	0.14	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
183.49	0.08	100	3	100% MUDSTONE	GREY, VERY WEAK ROCK.
183.56	0.07	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
183.94	0.38	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
183.99	0.05	100	3	100% MUDSTONE	GREY, WEAK ROCK.
184.23	0.24	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
184.27	0.04	100	3	100% MUDSTONE	GREY, WEAK ROCK.
184.60	0.33	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
184.63	0.03	100	3	100% MUDSTONE	GREY, WEAK ROCK.
184.72	0.09	100	3	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
184.73	0.01	100	3	100% MUDSTONE	GREY, WEAK ROCK.
185.15	0.42	100	3	100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.
185.48	0.33	100	4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
185.64	0.16	100	4	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
186.55	0.91	100	4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
186.58	0.03	100	4	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
186.63	0.05	100	4	100% CLAYSTONE	LIGHT GREY, FIRM.
186.93	0.30	100	4	100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
188.00	1.07	100	4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
188.05	0.05	100	4	100% MUDSTONE	GREY, VERY WEAK ROCK.
188.95	0.90	100	5	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
191.10	2.15	100	5	80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BLACK. GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
191.12	0.02	100	5	100% COAL, HEAVY DULL	WITH CALCITE ON CLEAT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF DALMAYNE B : THICKNESS= 10.14 M; SAMPLED THICKNESS=10.14 M	
191.16	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
191.45	0.29	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
191.95	0.50	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
197.66	5.71	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION.
197.94	0.28	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, MODERATELY WEAK ROCK.
199.43	1.49	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, LAMINATED.
200.34	0.91	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
202.56	2.22	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED, WITH LOAD CASTS.
				TOP OF DALMAYNE C : 332.44 M R.L.	
202.76	0.20	100	6	100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, MODERATELY WEAK ROCK.
207.22	4.46	90	6	90% MUDSTONE 10% MUDSTONE	COALY, BANDS, BLACK. GREY-BROWN. WITH BANDS OF CLAY, MODERATELY WEAK ROCK, THINLY BEDDED.
207.38	0.16	100	6	100% MUDSTONE	COALY, LENSES, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
				BASE OF DALMAYNE C : THICKNESS= 4.82 M; SAMPLED THICKNESS= 4.82 M	
208.13	0.75	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
208.65	0.52	100		50% MUDSTONE 50% MUDSTONE	GREY. LIGHT GREY. MODERATELY WEAK ROCK, WITH LOAD CASTS, LAMINATED.
209.33	0.68	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
209.90	0.57	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
210.41	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
210.70	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.
218.13	7.43	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
219.03	0.90	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
219.66	0.63	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, FRIABLE, GREY, MODERATELY WEAK ROCK, LAMINATED.
220.70	1.04	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
222.17	1.47	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
223.63	1.46	100		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEAK ROCK.
225.56	1.93	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
233.62	8.06	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MEDIUM BEDDED, WITH CARBONACEOUS WISPS.
234.83	1.21	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
235.90	1.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
236.30	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
237.30	1.00	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
237.75	0.45	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
237.91	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
243.72	5.81	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
248.87	5.15	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
249.02	0.15	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
250.82	1.80	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
254.46	3.64	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
254.61	0.15	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
254.72	0.11	100		100% SANDSTONE,COARSE GRAINED	CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
255.86	1.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
256.14	0.28	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
257.22	1.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
257.71	0.49	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
257.92	0.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
258.51	0.59	100		100% SANDSTONE	MED.-COARSE GRAINED, CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
259.21	0.70	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
261.48	2.27	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
264.65	3.17	100		100% SANDSTONE,COARSE GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
265.60	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
265.85	0.25	80		100% MUDSTONE	GREY, FIRM.
266.02	0.17	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
266.10	0.08	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE.
				TOP OF DALMAYNE D UPPER : 268.90 M R.L.	
266.17	0.07	100	7	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
266.20	0.03	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.33	0.13	100	7	100% COAL, DULL	
266.36	0.03	100	7	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
266.37	0.01	100	8	100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
266.38	0.01	100	8	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
266.46	0.08	100	8	100% MUDSTONE	BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
266.81	0.35	100	9	100% COAL, DULL	BRIGHT COAL, STREAKS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
266.82	0.01	100	9	100% MUDSTONE	ARENACEOUS, BROWN, MODERATELY WEAK ROCK.
266.87	0.05	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.91	0.04	100	9	100% MUDSTONE	BRIGHT COAL, LAMINAE, DARK BROWN, MODERATELY WEAK ROCK.
267.25	0.34	100	9	100% COAL, DULL	BRIGHT COAL, STREAKS.
267.29	0.04	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.19 M; SAMPLED THICKNESS= 1.19 M	
267.69	0.40	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
268.11	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
268.26	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
268.38	0.12	100		50% MUDSTONE 50% COAL, HEAVY DULL	BRIGHT COAL, LENSES, DARK BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
268.61	0.23	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
268.71	0.10	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
268.93	0.22	100		100% COAL, HEAVY DULL	BLACK, FIRM.
269.00	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, FIRM.
269.25	0.25	100		100% MUDSTONE	GREY, WEAK ROCK, THICKLY LAMINATED, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
269.55	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
269.70	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
270.55	0.85	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
271.00	0.45	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
271.33	0.33	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
271.67	0.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
271.75	0.08	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
271.94	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
272.10	0.16	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED.
272.34	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
273.75	1.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
274.33	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
278.71	4.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE D LOWER : 256.29 M R.L.		
278.78	0.07	100	10	100% COAL, DULL WITH FEW BRIGHT BANDS	
278.87	0.09	100	10	50% COAL, BRIGHT 50% CARBONACEOUS SHALE	THINLY LAMINATED.
279.12	0.25	100	10	100% COAL, DULL	
279.32	0.20	100	11	100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
279.45	0.13	100	12	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
279.57	0.12	100	12	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
279.66	0.09	100	12	100% COAL, HEAVY DULL	
279.69	0.03	100	12	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
279.71	0.02	100	12	100% MUDSTONE	ARENACEOUS, BROWN, MODERATELY WEAK ROCK.
279.74	0.03	100	12	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
279.99	0.25	100	13	100% COAL, DULL	
280.00	0.01	100	13	100% MUDSTONE	ARENACEOUS, CREAM, MODERATELY WEAK ROCK.
280.24	0.24	100	13	100% COAL, DULL	MUDSTONE, LAMINAE.
280.25	0.01	100	13	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
280.37	0.12	100	13	100% COAL, DULL	
280.38	0.01	100	13	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
280.72	0.34	100	13	100% COAL, DULL	
280.73	0.01	100	13	100% MUDSTONE	ARENACEOUS, BROWN, MODERATELY WEAK ROCK.
280.79	0.06	100	13	100% COAL, DULL	
280.80	0.01	100	13	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
281.30	0.50	100	13	100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LAMINAE.
				BASE OF DALMAYNE D LOWER : THICKNESS= 2.59 M; SAMPLED THICKNESS= 2.59 M	
281.90	0.60	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
282.40	0.50	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
282.76	0.36	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
282.88	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
283.28	0.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
283.42	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
283.76	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED.
285.81	2.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
287.00	1.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
287.11	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
287.27	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
287.96	0.69	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
290.00	2.04	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
291.88	1.88	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
293.90	2.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
295.50	1.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
295.63	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
295.87	0.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
298.16	2.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
298.25	0.09	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK BROWN, WEAK ROCK.
298.37	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
301.85	3.48	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
302.50	0.65	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
303.18	0.68	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
303.57	0.39	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
304.37	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
304.67	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
305.20	0.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
309.04	3.84	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
309.23	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
310.11	0.88	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
310.72	0.61	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
312.15	1.43	100		100% SILTSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
312.61	0.46	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
312.76	0.15	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
313.22	0.46	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
313.76	0.54	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, WEAK ROCK.
313.88	0.12	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, FIRM.
313.91	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN.
314.00	0.09	0		CORE LOSS	
315.09	1.09	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
316.10	1.01	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
316.55	0.45	100		100% SILTSTONE	GREY, WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
316.75	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
317.12	0.37	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
318.32	1.20	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
319.16	0.84	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
319.19	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
319.21	0.02	100		100% COAL, HEAVY DULL	
319.23	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
319.34	0.11	100		100% COAL, HEAVY DULL	
319.36	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
319.38	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
319.39	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
319.41	0.02	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BLACK, VERY WEAK ROCK.
319.52	0.11	100		100% COAL, DULL	
319.62	0.10	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BLACK, VERY WEAK ROCK.
319.76	0.14	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
319.79	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
319.82	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
319.86	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
319.95	0.09	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
320.02	0.07	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
320.30	0.28	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
321.12	0.82	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
321.29	0.17	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
322.37	1.08	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
322.44	0.07	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
324.29	1.85	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
324.72	0.43	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
325.17	0.45	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
325.30	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
325.34	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, SOFT.
325.51	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
			TOP OF DALMAYNE E : 209.49 M R.L.		
325.66	0.15	100		100% COAL, HEAVY DULL	BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
325.73	0.07	100		100% COAL, HEAVY DULL	BLACK, VERY WEAK ROCK.
			BASE OF DALMAYNE E : THICKNESS= 0.22 M; SAMPLED THICKNESS= 0.00 M		
325.80	0.07	100		100% MUDSTONE	CARBONACEOUS, FISSILE, DARK GREY, FIRM.
325.95	0.15	100		100% MUDSTONE	CALCITIC, FISSILE, BROWN, VERY WEAK ROCK.
326.00	0.05	100		100% MUDSTONE	BADLY BROKEN, FISSILE, GREY, WEAK ROCK.
326.03	0.03	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BLACK, WEAK ROCK.
326.05	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
326.07	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
327.41	1.34	100		100% SILTSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
327.60	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
328.00	0.40	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, WEAK ROCK.
328.24	0.24	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
328.53	0.29	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
329.00	0.47	100		100% SANDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
329.42	0.42	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
329.48	0.06	100		100% MUDSTONE	COALY, LENSES, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
329.73	0.25	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
329.76	0.03	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
			TOP OF DALMAYNE E2 : 205.24 M R.L.		
329.79	0.03	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
329.83	0.04	100	14	100% COAL, HEAVY DULL	
329.92	0.09	100	14	100% COAL, DULL	
329.93	0.01	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
329.96	0.03	100	14	100% SILTSTONE	ARGILLACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
330.02	0.06	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
330.08	0.06	100	14	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
330.09	0.01	100	14	100% COAL, INTERBANDED DULL AND BRIGHT	
330.13	0.04	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
330.15	0.02	100	14	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
330.19	0.04	100	14	100% COAL, DULL	
330.21	0.02	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
330.23	0.02	100	14	100% MUDSTONE	ARGILLACEOUS, FISSILE, BROWN, MODERATELY WEAK ROCK.
330.32	0.09	100	14	100% COAL, HEAVY DULL	
330.33	0.01	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
330.37	0.04	100	14	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
330.38	0.01	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
330.40	0.02	100	14	100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN, MODERATELY WEAK ROCK.
330.55	0.15	100	14	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
330.56	0.01	100	14	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
330.78	0.22	100	14	100% COAL, HEAVY DULL	
330.91	0.13	100	14	100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
				BASE OF DALMAINE E2 : THICKNESS= 1.15 M; SAMPLED THICKNESS= 1.15 M	
331.90	0.99	100	15	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
333.02	1.12	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
334.46	1.44	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
334.80	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
334.97	0.17	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
335.06	0.09	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
336.09	1.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
336.39	0.30	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
336.44	0.05	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
337.46	1.02	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
337.55	0.09	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
338.88	1.33	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
339.91	1.03	100		100% LIMESTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK, WITH DISTURBED BEDDING.
341.13	1.22	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
342.02	0.89	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
342.82	0.80	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS.
344.60	1.78	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
344.73	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
344.84	0.11	100		100% CARBONACEOUS SHALE	BLACK, WEAK ROCK.
344.96	0.12	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, MODERATELY WEAK ROCK.
345.38	0.42	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
346.00	0.62	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
347.33	1.33	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
347.89	0.56	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
348.07	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
349.28	1.21	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
349.41	0.13	100		100% MUDSTONE	CARBONACEOUS, COALY, BROWN-BLACK, MODERATELY WEAK ROCK.
349.47	0.06	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, FIRM.
350.00	0.53	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
350.25	0.25	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WITH BANDS OF CLAY, WEAK ROCK.
351.48	1.23	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
352.44	0.96	100		55% SANDSTONE 45% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. MODERATELY WEAK ROCK.
353.00	0.56	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
353.03	0.03	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
354.52	1.49	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
354.56	0.04	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
354.73	0.17	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
355.11	0.38	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
355.28	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
356.12	0.84	100		100% MUDSTONE	SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
356.60	0.48	100		100% SANDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
356.98	0.38	100		100% SILTSTONE	MICACEOUS, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
357.67	0.69	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
358.00	0.33	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
358.25	0.25	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
361.54	3.29	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
361.62	0.08	100		100% COAL, DULL	
361.76	0.14	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
361.90	0.14	100		100% SILTSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
362.02	0.12	100		100% SANDSTONE	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
362.57	0.55	100		100% SANDSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
362.66	0.09	100		100% SANDSTONE	BRIGHT COAL, BANDS, GREY, MODERATELY WEAK ROCK.
362.79	0.13	100		100% SANDSTONE	PEBBLY, SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
363.37	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
363.54	0.17	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, MODERATELY WEAK ROCK, LAMINATED.
364.50	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
366.63	2.13	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
368.05	1.42	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
368.53	0.48	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
368.77	0.24	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
371.47	2.70	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
371.56	0.09	100		100% SILTSTONE	ARGILLACEOUS, GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
372.00	0.44	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
374.55	2.55	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
374.73	0.18	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
376.02	1.29	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
377.00	0.98	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
377.13	0.13	100		100% SILTSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
377.23	0.10	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
377.48	0.25	100		100% SANDSTONE	MED.-FINE GRAINED, PELLETAL, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
377.74	0.26	100		100% SANDSTONE	PEBBLY, MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
378.80	1.06	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
380.02	1.22	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
380.24	0.22	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
380.33	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
382.20	1.87	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
382.51	0.31	100		100% SANDSTONE	COALY, BANDS, GREY-GREEN, MODERATELY WEAK ROCK.
383.00	0.49	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
383.35	0.35	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
383.44	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
383.74	0.30	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, GREY-GREEN, MODERATELY WEAK ROCK.
383.93	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
384.04	0.11	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
387.13	3.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
387.26	0.13	100		100% SANDSTONE	CARBONACEOUS, LENSES, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
387.33	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
387.36	0.03	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
387.38	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK.
387.65	0.27	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
388.49	0.84	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
389.10	0.61	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
389.58	0.48	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. ARENACEOUS, LAMINAE, GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
390.96	1.38	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
390.98	0.02	100		100% COAL, HEAVY DULL	
391.06	0.08	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
391.09	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
391.11	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
391.17	0.06	100		100% COAL, HEAVY DULL	
391.20	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
391.22	0.02	100		100% COAL, HEAVY DULL	BADLY BROKEN.
391.31	0.09	100		100% SILTSTONE	ARGILLACEOUS, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
392.11	0.80	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
392.42	0.31	100		100% SILTSTONE	MODERATELY WEAK ROCK.
393.12	0.70	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
395.57	2.45	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
395.94	0.37	100		100% SANDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK.
396.11	0.17	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
396.22	0.11	100		100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
396.44	0.22	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK.
396.93	0.49	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
397.03	0.10	100		100% SANDSTONE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
398.12	1.09	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
398.16	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, WEAK ROCK.
398.49	0.33	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, MODERATELY WEAK ROCK.
398.56	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
398.59	0.03	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
399.25	0.66	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
399.26	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
399.28	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
399.29	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
399.38	0.09	100		100% MUDSTONE	CARBONACEOUS, FISSILE, DARK BROWN, WEAK ROCK.
399.45	0.07	100		100% SILTSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
399.50	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
400.72	1.22	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. LAMINAE, GREY. MODERATELY WEAK ROCK.
401.07	0.35	100		100% SILTSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK.
401.22	0.15	100		100% SANDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
401.72	0.50	100		100% SILTSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
402.28	0.56	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
402.53	0.25	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
402.72	0.19	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
402.76	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
402.77	0.01	100		100% COAL, BRIGHT	
402.79	0.02	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
402.85	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
403.15	0.30	100		100% SILTSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
403.22	0.07	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
403.41	0.19	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
403.56	0.15	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
404.88	1.32	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
405.59	0.71	100		100% SILTSTONE	GREY-BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
406.00	0.41	100		100% SILTSTONE	ARENACEOUS, LIGHT BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
407.42	1.42	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREEN, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
408.32	0.90	100		100% SILTSTONE	GREY-GREEN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
408.62	0.30	100		100% SILTSTONE	LIGHT GREEN, MODERATELY WEAK ROCK, LAMINATED.
409.77	1.15	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
410.00	0.23	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	10.14 M	180.98 - 191.12 M	10.14 M
DC	4.82 M	202.56 - 207.38 M	4.82 M
DDU	1.19 M	266.10 - 267.29 M	1.19 M
DDL	2.59 M	278.71 - 281.30 M	2.59 M
DE	0.00 M	325.51 - 325.73 M	0.22 M
DE2	1.15 M	329.76 - 330.91 M	1.15 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	180.98 - 182.41 M	1.43 M
2	182.41 - 183.00 M	0.59 M
3	183.00 - 185.15 M	2.15 M
4	185.15 - 188.05 M	2.90 M
5	188.05 - 191.12 M	3.07 M
6	202.56 - 207.38 M	4.82 M
7	266.10 - 266.36 M	0.26 M
8	266.36 - 266.46 M	0.10 M
9	266.46 - 267.29 M	0.83 M
10	278.71 - 279.12 M	0.41 M
11	279.12 - 279.32 M	0.20 M
12	279.32 - 279.74 M	0.42 M
13	279.74 - 281.30 M	1.56 M
14	329.76 - 330.91 M	1.15 M
15	330.91 - 331.90 M	0.99 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 15

HOLE TYPE	CORE	
EASTING	598,000 M	GRID
NORTHING	5,387,000 M	GRID
ELEVATION	570.00 M	
TOTAL DEPTH DRILLED	445.60 M	
DRILLING STARTED	31/10/78	
DRILLING TIME	10 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
18.50	18.50	0		CORE LOSS	
22.70	4.20	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
25.60	2.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
31.30	5.70	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
38.75	7.45	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
39.25	0.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
40.00	0.75	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
46.00	6.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
49.10	3.10	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
55.50	6.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 10 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
61.90	6.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
66.00	4.10	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
70.00	4.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.20	9.20	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
101.00	21.80	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
103.00	2.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, STRONG ROCK.
133.60	30.60	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS AND ZEOLITE ON JOINTS, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
144.00	10.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS.
146.00	2.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
152.60	6.60	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK.
156.50	3.90	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH CHLORITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
176.60	20.10	100		100% DOLERITE	MED.-FINE GRAINED, GREY, VERY STRONG ROCK.
178.00	1.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS AND ZEOLITE ON JOINTS, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
283.50	105.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, STRONG ROCK, WIDELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
321.20	37.70	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
323.60	2.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
326.80	3.20	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, VERY STRONG ROCK.
328.10	1.30	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS AND ZEOLITE ON JOINTS, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
401.00	72.90	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
404.80	3.80	100		100% DOLERITE	GREY-GREEN, WITH CHLORITE ON JOINTS AND ZEOLITE ON JOINTS, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
420.70	15.90	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
422.40	1.70	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
438.60	16.20	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
445.60	7.00	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 16

HOLE TYPE	CORE	
EASTING	600,700 M	GRID
NORTHING	5,388,900 M	GRID
ELEVATION	545.00 M	
TOTAL DEPTH DRILLED	321.86 M	
DRILLING STARTED	10/11/78	
DRILLING TIME	17 DAYS	
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	100.40 M	
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
21.50	21.50	0		CORE LOSS	
21.63	0.13	100		100% MUDSTONE	SILTSTONE, ORANGE-YELLOW, WEAK ROCK.
22.38	0.75	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
22.98	0.60	100		100% MUDSTONE	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
23.03	0.05	100		100% CLAYSTONE	FISSILE, BADLY BROKEN, GREY-GREEN, VERY WEAK ROCK.
23.40	0.37	100		100% MUDSTONE	SILTSTONE, DARK GREY, WEAK ROCK.
23.60	0.20	100		100% CLAYSTONE	GREY-GREEN, VERY WEAK ROCK.
24.07	0.47	100		100% MUDSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
24.12	0.05	100		100% CLAYSTONE	FISSILE, GREY-GREEN, VERY WEAK ROCK.
24.15	0.03	100		100% MUDSTONE	GREY, WEAK ROCK.
24.23	0.08	100		100% CLAYSTONE	FISSILE, GREY-GREEN, VERY WEAK ROCK.
24.36	0.13	100		100% MUDSTONE	SILTSTONE, WEAK ROCK.
24.80	0.44	100		100% CLAYSTONE	FISSILE, GREY-GREEN, VERY WEAK ROCK.
24.96	0.16	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
25.02	0.06	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
25.24	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
25.58	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
25.73	0.15	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
26.06	0.33	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
26.66	0.60	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
26.79	0.13	100		100% CLAYSTONE	FISSILE, GREY-GREEN, WEAK ROCK.
26.83	0.04	100		100% CLAYSTONE	GREEN, WEAK ROCK.
26.92	0.09	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
26.96	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
27.52	0.56	100		100% SILTSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
27.66	0.14	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, FIRM, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
27.70	0.04	100		100% COAL, HEAVY DULL	
27.87	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
27.90	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
27.92	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
27.94	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
27.98	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
28.12	0.14	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
28.13	0.01	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
28.15	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
28.20	0.05	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
28.30	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
28.44	0.14	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
28.47	0.03	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
28.60	0.13	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
28.77	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
28.81	0.04	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
28.82	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
29.03	0.21	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
29.05	0.02	100		100% CLAYSTONE	FRIABLE, BROWN, SOFT.
29.06	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.12	0.06	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
29.14	0.02	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, FIRM.
29.15	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
29.22	0.07	100		100% CLAYSTONE	FISSILE, CREAM, FIRM.
29.24	0.02	100		100% COAL, DULL	
29.29	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
29.33	0.04	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
29.47	0.14	100		100% CLAYSTONE	FISSILE, BUFF, VERY WEAK ROCK.
29.56	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
29.79	0.23	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
29.94	0.15	100		100% SILTSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
29.97	0.03	100		100% COAL, HEAVY DULL	
30.00	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
30.01	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
30.22	0.21	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
30.23	0.01	100		100% COAL, HEAVY DULL	
30.28	0.05	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
30.34	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
30.41	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
30.51	0.10	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
30.72	0.21	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
30.78	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
30.83	0.05	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
30.88	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
30.91	0.03	100		100% MUDSTONE	COALY, LENSES, BROWN, WEAK ROCK.
30.92	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
30.94	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
30.99	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.53	0.54	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
31.61	0.08	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, VERY WEAK ROCK.
32.00	0.39	100		100% MUDSTONE	SILTSTONE, DARK BROWN, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
34.55	2.55	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
35.05	0.50	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
35.60	0.55	100		100% SILTSTONE	ARENACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
35.97	0.37	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, WEAK ROCK, THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
36.70	0.73	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, WEAK ROCK, VERY THINLY BEDDED.
36.88	0.18	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WEAK ROCK.
38.00	1.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MEDIUM BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
40.60	2.60	60		100% PEBBLE CONGLOMERATE	LIGHT GREY, WITH MUD PELLETS.
40.83	0.23	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT GREY, WEAK ROCK, LAMINATED.
40.87	0.04	100		100% CLAYSTONE	FISSILE, LIGHT GREY, VERY WEAK ROCK.
41.00	0.13	100		100% SILTSTONE	GREY, WEAK ROCK.
41.08	0.08	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, FIRM.
41.18	0.10	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT GREY, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
41.25	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
41.32	0.07	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
41.39	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
41.44	0.05	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, VERY WEAK ROCK.
41.45	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
41.46	0.01	100		100% COAL, HEAVY DULL	
41.49	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.51	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
41.64	0.13	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
42.03	0.39	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
42.11	0.08	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
42.18	0.07	100		100% SILTSTONE	COALY, LENSES, GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
43.63	1.45	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LAMINAE, BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
44.18	0.55	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
45.41	1.23	85		100% SANDSTONE	CALCAREOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
45.59	0.18	100		100% SANDSTONE	COALY, BANDS, LIGHT GREY.
45.70	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
45.77	0.07	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
46.06	0.29	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
46.09	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
46.12	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
46.14	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
46.23	0.09	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
46.24	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
46.26	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
46.29	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
46.33	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
46.49	0.16	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.51	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
46.54	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
46.57	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
46.60	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
46.61	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
46.73	0.12	100		100% MUDSTONE	COALY, STREAKS, DARK BROWN, MODERATELY WEAK ROCK.
46.76	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
46.81	0.05	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
46.84	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
46.89	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
46.90	0.01	100		100% COAL, HEAVY DULL	
46.93	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
46.95	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
46.96	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	
47.00	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
47.09	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
47.35	0.26	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
47.40	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, WEAK ROCK.
47.43	0.03	100		100% CLAYSTONE	FISSILE, GREY-GREEN, VERY WEAK ROCK.
47.47	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
47.50	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
47.52	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
47.54	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
47.58	0.04	100		100% MUDSTONE	COALY, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
47.72	0.14	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
48.36	0.64	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
48.49	0.13	100		100% SILTSTONE	ARGILLACEOUS, FISSILE, GREY-BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.83	0.34	100		100% SILTSTONE	ARENACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
49.00	0.17	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
49.22	0.22	100		100% CLAYSTONE	MICACEOUS, LIGHT GREEN, MODERATELY WEAK ROCK.
49.40	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
49.42	0.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
49.48	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
49.51	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
49.56	0.05	100		100% COAL, HEAVY DULL	
49.57	0.01	100		100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN, MODERATELY WEAK ROCK.
49.62	0.05	100		100% COAL, HEAVY DULL	
49.68	0.06	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, BROWN, MODERATELY WEAK ROCK.
49.81	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
49.87	0.06	100		100% COAL, HEAVY DULL	
49.88	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
49.92	0.04	100		100% COAL, HEAVY DULL	
49.97	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
49.99	0.02	100		100% COAL, BRIGHT	
50.06	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
50.08	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
50.17	0.09	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
50.24	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
50.31	0.07	100		100% COAL, BRIGHT	
50.34	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
50.36	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
50.38	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
50.46	0.08	100		100% COAL, HEAVY DULL	BADLY BROKEN.
50.55	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
50.57	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
50.58	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
50.65	0.07	100		100% COAL, HEAVY DULL	
50.68	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
50.70	0.02	100		100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, MODERATELY WEAK ROCK.
50.78	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
50.82	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
50.85	0.03	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BROWN-BLACK, VERY WEAK ROCK.
50.95	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
50.98	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
51.00	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
51.04	0.04	100		100% COAL, HEAVY DULL	
51.09	0.05	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
51.20	0.11	100		100% COAL, HEAVY DULL	
51.21	0.01	100		100% MUDSTONE	BROWN, WEAK ROCK.
51.35	0.14	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
51.40	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
51.46	0.06	100		100% COAL, HEAVY DULL	
51.50	0.04	100		100% COAL, DULL	
51.53	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
51.55	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
51.90	0.35	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
51.95	0.05	100		100% COAL, HEAVY DULL	
51.96	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
51.98	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
52.00	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
52.09	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
52.19	0.10	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
52.33	0.14	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.39	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
52.42	0.03	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.
52.50	0.08	100		100% COAL, HEAVY DULL	
52.52	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
52.55	0.03	100		100% COAL, HEAVY DULL	
52.58	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
52.62	0.04	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
52.64	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
52.65	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
52.67	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
52.69	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
53.05	0.36	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
53.45	0.40	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
53.85	0.40	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
53.93	0.08	100		100% SILTSTONE	GREY, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
55.23	1.30	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
55.38	0.15	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-GREEN, MODERATELY WEAK ROCK.
56.22	0.84	100		100% SILTSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
56.32	0.10	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
58.75	2.43	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.08	0.33	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
59.44	0.36	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
59.77	0.33	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
60.10	0.33	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
60.32	0.22	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. GREY-BROWN. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
60.92	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
60.96	0.04	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
61.66	0.70	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
61.77	0.11	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
62.27	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
62.38	0.11	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, MODERATELY WEAK ROCK.
62.68	0.30	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
62.84	0.16	100		100% SANDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH LOAD CASTS.
63.00	0.16	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
63.09	0.09	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
63.19	0.10	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, GREY-GREEN, MODERATELY WEAK ROCK.
63.57	0.38	100		100% SANDSTONE	COALY, LENSES, GREY-GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
64.80	1.23	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, MODERATELY WEAK ROCK.
64.81	0.01	100		100% COAL, BRIGHT	
65.39	0.58	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
65.85	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
65.91	0.06	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.09	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
66.12	0.03	100		100% SILTSTONE	FRAGMENTED, GREY.
66.26	0.14	100		100% SILTSTONE	LIGHT GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
69.46	3.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
70.50	1.04	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
73.75	3.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
74.00	0.25	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
74.34	0.34	100		70% MUDSTONE 30% SANDSTONE	SILTSTONE, GREY. COALY, LENSES, LIGHT GREY. WEAK ROCK, WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES.
74.70	0.36	100		100% SANDSTONE	CARBONACEOUS, LENSES, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
75.69	0.99	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
76.00	0.31	100		100% SANDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
76.06	0.06	100		100% MUDSTONE	PEBBLY, ARENACEOUS, BROWN, WEAK ROCK, WITH MUD PELLETS.
76.10	0.04	100		100% SANDSTONE	COALY, LENSES, MODERATELY WEAK ROCK, WITH MUD PELLETS.
76.30	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
76.36	0.06	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
76.45	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
76.51	0.06	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
76.53	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
76.55	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
76.59	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
76.70	0.11	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
76.71	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
76.84	0.13	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
76.92	0.08	100		100% COAL, HEAVY DULL	
77.00	0.08	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
77.03	0.03	100		100% COAL, HEAVY DULL	
77.07	0.04	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
77.09	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WITH MUD PELLETS.
77.10	0.01	100		50% MUDSTONE 50% PYRITE	BROWN. MODERATELY STRONG ROCK.
77.11	0.01	100		100% COAL, HEAVY DULL	
77.15	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
77.20	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	
77.24	0.04	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
77.27	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
77.29	0.02	100		100% COAL, HEAVY DULL	
77.38	0.09	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
77.40	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
77.42	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
77.48	0.06	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
77.54	0.06	100		100% CLAYSTONE	FISSILE, GREY-GREEN, WEAK ROCK.
77.58	0.04	100		100% MUDSTONE	ARGILLACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
77.67	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
77.73	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
77.77	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
77.78	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
78.30	0.52	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
78.68	0.38	100		100% SILTSTONE	LIGHT GREEN, WEAK ROCK.
79.94	1.26	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.47	0.53	100		100% SILTSTONE	LIGHT GREEN, WEAK ROCK.
80.58	0.11	100		100% SILTSTONE	BADLY BROKEN, GREY.
80.82	0.24	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK.
80.90	0.08	100		100% SILTSTONE	ARGILLACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
80.98	0.08	100		100% CLAYSTONE	LIGHT GREEN, WEAK ROCK.
81.45	0.47	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
82.28	0.83	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
82.62	0.34	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
82.97	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
84.30	1.33	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, WITH MICA, MODERATELY WEAK ROCK.
84.54	0.24	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
86.02	1.48	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
86.25	0.23	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
89.18	2.93	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
91.36	2.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
91.68	0.32	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
92.31	0.63	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE B : 452.69 M R.L.	
92.32	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
92.35	0.03	100		100% COAL, HEAVY DULL	
92.38	0.03	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
92.44	0.06	100		100% COAL, HEAVY DULL	
92.64	0.20	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
92.84	0.20	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
92.88	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
93.02	0.14	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
93.07	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
93.12	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
93.15	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
93.16	0.01	100		100% COAL, HEAVY DULL	
93.18	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
93.20	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
93.23	0.03	100		100% COAL, HEAVY DULL	
93.24	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
93.26	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
93.31	0.05	100		100% COAL, HEAVY DULL	
93.33	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
93.35	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
93.37	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
93.42	0.05	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
93.45	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
93.46	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
93.48	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
93.50	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
93.52	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
93.57	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
93.67	0.10	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED.
93.70	0.03	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK.
93.81	0.11	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK.
94.17	0.36	100		100% SILTSTONE	BROWN, WEAK ROCK.
94.71	0.54	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
95.02	0.31	100		100% SILTSTONE	ARENACEOUS, LAMINAE, BROWN, WEAK ROCK, VERY THINLY BEDDED.
95.14	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.04	0.90	100		100% SANDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
96.12	0.08	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
96.98	0.86	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
97.21	0.23	100		100% SANDSTONE	CARBONACEOUS, LENSES, GREY-GREEN, MODERATELY WEAK ROCK.
97.26	0.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
97.80	0.54	100		100% SANDSTONE	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
98.20	0.40	100		100% SANDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
98.77	0.57	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
99.16	0.39	100		100% SANDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, THINLY BEDDED.
99.21	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
99.29	0.08	100		100% COAL, HEAVY DULL	
99.46	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
99.69	0.23	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
99.77	0.08	100		100% MUDSTONE	BROWN.
99.83	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
99.86	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
99.92	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
100.02	0.10	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
100.04	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
100.07	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
100.11	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
100.12	0.01	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK.
100.23	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
100.31	0.08	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WEAK ROCK.
100.56	0.25	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
100.58	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.88	0.30	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
101.06	0.18	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
101.09	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
101.10	0.01	100		100% COAL, HEAVY DULL	
101.11	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
101.16	0.05	100		100% COAL, HEAVY DULL	
101.18	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
101.20	0.02	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, MODERATEL WEAK ROCK.
101.26	0.06	100		100% COAL, HEAVY DULL	BADLY BROKEN.
101.33	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
101.36	0.03	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
101.53	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
101.56	0.03	100		100% COAL, HEAVY DULL	
101.62	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
101.68	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
101.70	0.02	100		100% COAL, BRIGHT	
101.71	0.01	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
101.82	0.11	100		100% COAL, HEAVY DULL	
101.83	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
101.86	0.03	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, WEAK ROCK.
101.90	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
101.93	0.03	100		100% COAL, HEAVY DULL	
101.99	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
102.05	0.06	100		100% COAL, HEAVY DULL	
102.12	0.07	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
102.27	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
102.32	0.05	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
102.34	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
102.37	0.03	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
102.44	0.07	50		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.49	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
102.53	0.04	100		100% MUDSTONE	LIGHT GREEN, WEAK ROCK.
102.63	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
102.71	0.08	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
102.87	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
102.94	0.07	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
103.00	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
103.01	0.01	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
103.08	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
103.12	0.04	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
103.21	0.09	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, WEAK ROCK.
103.24	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
103.30	0.06	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
103.33	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
103.38	0.05	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT GREEN, WEAK ROCK.
103.44	0.06	100		100% COAL, HEAVY DULL	
103.52	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
103.55	0.03	100		100% COAL, HEAVY DULL	
103.61	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
103.67	0.06	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
103.75	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
103.76	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
103.77	0.01	100		100% MUDSTONE	LIGHT GREEN, WEAK ROCK.
103.82	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
103.95	0.13	100		100% CLAYSTONE	LIGHT BROWN, WEAK ROCK.
103.97	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
104.17	0.20	100		100% MUDSTONE	LIGHT GREEN, WEAK ROCK.
104.27	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, WITH MUD PELLETS.
104.31	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
104.33	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
104.34	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
104.46	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
104.49	0.03	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
104.53	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
104.56	0.03	100		100% COAL, HEAVY DULL	
104.62	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
104.84	0.22	100		100% COAL, HEAVY DULL	
104.86	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
104.96	0.10	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK.
105.00	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
105.06	0.06	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
105.22	0.16	100		100% COAL, HEAVY DULL	
105.25	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
105.33	0.08	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
105.35	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
105.40	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.42	0.02	100		100% COAL, BRIGHT	
105.58	0.16	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
105.59	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
105.62	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.64	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
105.65	0.01	100		100% COAL, HEAVY DULL	
105.70	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.74	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
105.81	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
105.84	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
105.88	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
105.92	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN.
105.97	0.05	100		100% COAL, DULL	
106.07	0.10	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
106.17	0.10	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK.
106.19	0.02	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
106.49	0.30	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
				BASE OF DALMAYNE B : THICKNESS= 14.18 M; SAMPLED THICKNESS= 0.00 M	
106.74	0.25	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
107.00	0.26	100		100% SILTSTONE	BADLY BROKEN, GREY.
107.98	0.98	100		100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
108.20	0.22	100		100% MUDSTONE	BADLY BROKEN, GREY, WEAK ROCK.
109.83	1.63	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
110.14	0.31	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
110.76	0.62	100		100% SILTSTONE	GREY, WEAK ROCK.
111.11	0.35	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
111.54	0.43	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
111.79	0.25	100		100% CLAYSTONE	FISSILE, MICACEOUS, LIGHT GREEN, VERY WEAK ROCK.
111.88	0.09	100		100% MUDSTONE	GREY, WEAK ROCK.
111.89	0.01	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
112.08	0.19	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
112.51	0.43	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK, THICKLY LAMINATED.
112.90	0.39	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
113.31	0.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY STRONG ROCK.
113.98	0.67	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, WITH FLAME/PULL STRUCTS.
115.97	1.99	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
116.28	0.31	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
				TOP OF DALMAYNE C : 428.72 M R.L.	
116.46	0.18	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
116.49	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
116.59	0.10	100		100% COAL, HEAVY DULL	
117.22	0.63	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
117.57	0.35	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
117.90	0.33	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
118.03	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
118.38	0.35	100		100% MUDSTONE	ARGILLACEOUS, FISSILE, LIGHT BROWN, VERY WEAK ROCK.
118.41	0.03	100		100% COAL, HEAVY DULL	
118.44	0.03	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
118.49	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
118.52	0.03	100		100% MUDSTONE	PYRITIC, FISSILE, LIGHT BROWN, WEAK ROCK.
118.57	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
118.59	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
118.70	0.11	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
118.81	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
119.15	0.34	50		100% MUDSTONE	BROWN, VERY WEAK ROCK.
119.27	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
119.33	0.06	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
119.94	0.61	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
119.98	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN, MODERATELY WEAK ROCK.
120.09	0.11	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
121.17	1.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
121.21	0.04	100		100% MUDSTONE	ARENACEOUS, CARBONACEOUS, DARK BROWN, WEAK ROCK.
121.26	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
121.28	0.02	100		100% MUDSTONE	BADLY BROKEN, BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.42	0.14	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
			BASE OF DALMAYNE C : THICKNESS= 5.14 M; SAMPLED THICKNESS= 0.00 M		
121.48	0.06	100		100% SILTSTONE	GREY.
121.57	0.09	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
121.88	0.31	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
122.02	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
122.23	0.21	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
122.28	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
123.11	0.83	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, WEAK ROCK, WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES.
123.23	0.12	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.30	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
124.40	0.10	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, WEAK ROCK.
125.19	0.79	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
127.75	2.56	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.34	0.59	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
128.54	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
128.89	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
129.63	0.74	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
130.16	0.53	100		100% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
130.76	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
131.07	0.31	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.48	0.41	100		100% SANDSTONE	COALY, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
131.66	0.18	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
131.91	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
133.26	1.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
133.72	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
134.00	0.28	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
135.54	1.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
136.08	0.54	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
136.60	0.52	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
136.79	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
137.20	0.41	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
138.96	1.76	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
142.12	3.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
142.18	0.06	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK.
145.01	2.83	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
145.16	0.15	100		100% MUDSTONE	SILTSTONE, BROWN, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
145.68	0.52	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
150.11	4.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
150.38	0.27	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
154.60	4.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
155.00	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
157.80	2.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
157.83	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
157.92	0.09	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.00	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
158.25	0.25	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
158.36	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
158.38	0.02	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
160.55	2.17	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
162.56	2.01	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
163.21	0.65	100		100% SANDSTONE	MED.-COARSE GRAINED, CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
164.13	0.92	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
164.68	0.55	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
166.90	2.22	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
169.50	2.60	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
170.00	0.50	0		CORE LOSS	
172.85	2.85	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
175.90	3.05	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
178.67	2.77	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
182.00	3.33	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
182.07	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
182.26	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
182.76	0.50	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
183.44	0.68	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
184.54	1.10	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
185.23	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
185.43	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
185.45	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
185.70	0.25	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, LAMINATED.
190.13	4.43	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
190.70	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
191.76	1.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
193.29	1.53	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.[illegible]	2.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
196.77	0.62	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, .
198.66	1.89	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
199.02	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
199.41	0.39	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
199.47	0.06	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
199.62	0.15	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK, MODERATELY WEAK ROCK.
199.76	0.14	0		CORE LOSS	
200.00	0.24	100		100% MUDSTONE	CARBONACEOUS, SIDERITIC, BROWN-BLACK, MODERATELY STRONG ROCK.
200.06	0.06	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
200.09	0.03	100		100% CLAYSTONE	GREY-GREEN, VERY WEAK ROCK.
200.12	0.03	100		100% CLAYSTONE	GREEN, VERY WEAK ROCK.
200.21	0.09	100		100% MUDSTONE	CARBONACEOUS, SHALY, BROWN-BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
202.85	2.64	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
213.82	10.97	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
213.96	0.14	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
214.03	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
214.17	0.14	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
215.00	0.83	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
215.20	0.20	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
216.75	1.55	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
217.35	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
218.45	1.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, MODERATELY WEAK ROCK.
218.53	0.08	100		100% SANDSTONE,COARSE GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
218.85	0.32	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
219.10	0.25	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, CREAM, MODERATELY STRONG ROCK.
221.40	2.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
222.56	1.16	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
226.46	3.90	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
226.63	0.17	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
226.66	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
226.79	0.13	100		100% MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK.
226.84	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
227.35	0.51	100		100% SANDSTONE	SILTSTONE, LENSES, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, WITH FLAME/PULL STRUCTS.
227.49	0.14	100		100% MUDSTONE	SILTSTONE, LENSES, BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
227.67	0.18	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
233.77	6.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
234.05	0.28	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
235.34	1.29	90		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
235.90	0.56	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
236.49	0.59	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
236.93	0.44	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WITH MICA, MODERATELY WEAK ROCK, THINLY LAMINATED.
237.07	0.14	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
237.40	0.33	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK BROWN, WEAK ROCK.
237.84	0.44	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
238.54	0.70	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
238.59	0.05	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, BROWN-BLACK, MODERATELY WEAK ROCK.
238.61	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
238.67	0.06	100		100% CARBONACEOUS SHALE	FISSILE, BLACK, VERY WEAK ROCK.
238.95	0.28	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
238.97	0.02	100		100% COAL, BRIGHT	
239.00	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
239.43	0.43	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
239.50	0.07	100		100% SANDSTONE,FINE GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
239.97	0.47	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
240.06	0.09	100		100% SILTSTONE	CALCITIC, ARENACEOUS, GREY, MODERATELY WEAK ROCK.
240.33	0.27	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
240.77	0.44	100		100% SILTSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
240.98	0.21	100		100% MUDSTONE	BADLY BROKEN, GREY, VERY WEAK ROCK.
241.50	0.52	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
242.84	1.34	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
242.86	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
242.94	0.08	100		100% COAL, HEAVY DULL	
242.97	0.03	100		100% CALCITE	ARGILLACEOUS, CREAM, MODERATELY WEAK ROCK.
243.22	0.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
243.29	0.07	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
243.46	0.17	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
		TOP OF	DALMAYNE E : 301.54 M R.L.		
243.90	0.44	100		100% COAL, HEAVY DULL	
243.98	0.08	100		100% MUDSTONE	CARBONACEOUS, COALY, DARK BROWN, MODERATELY WEAK ROCK.
244.07	0.09	100		100% COAL, HEAVY DULL	
244.10	0.03	100		100% COAL, DULL	
244.16	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
244.17	0.01	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
244.26	0.09	100		100% COAL, HEAVY DULL	
244.31	0.05	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
		BASE OF	DALMAYNE E : THICKNESS= 0.85 M; SAMPLED THICKNESS= 0.00 M		
244.36	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
244.37	0.01	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
244.61	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
244.81	0.20	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
244.84	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
245.01	0.17	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
245.02	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
245.04	0.02	100		100% COAL, HEAVY DULL	
245.10	0.06	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
245.20	0.10	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
245.34	0.14	100		100% SANDSTONE,FINE GRAINED	CALCITIC, SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
246.02	0.68	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
246.04	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
246.07	0.03	100		100% MUDSTONE	SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
246.17	0.10	100		100% COAL, HEAVY DULL	
246.22	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
246.25	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
246.28	0.03	100		100% COAL, HEAVY DULL	
246.39	0.11	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
246.42	0.03	100		100% COAL, HEAVY DULL	
246.47	0.05	100		100% MUDSTONE	BROWN, WEAK ROCK.
246.66	0.19	100		100% COAL, HEAVY DULL	
246.73	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
246.75	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
246.77	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
246.99	0.22	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
247.56	0.57	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
249.08	1.52	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
249.09	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
249.10	0.01	100		100% CALCITE	CREAM, MODERATELY WEAK ROCK.
249.12	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
				TOP OF DALMAYNE E2 : 295.88 M R.L.	
249.17	0.05	100		100% COAL, HEAVY DULL	
249.20	0.03	100		100% COAL, DULL	
249.45	0.25	100		100% COAL, HEAVY DULL	
249.46	0.01	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
249.55	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
249.57	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
249.61	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
				BASE OF DALMAYNE E2 : THICKNESS= 0.49 M; SAMPLED THICKNESS= 0.00 M	
250.60	0.99	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
250.64	0.04	100		100% MUDSTONE	CARBONACEOUS, CALCITIC, BROWN-BLACK, MODERATELY WEAK ROCK.
250.69	0.05	100		50% CLAYSTONE 50% CALCITE	LIGHT GREEN. CREAM. WEAK ROCK.
250.75	0.06	100		100% MUDSTONE	SILTSTONE, COALY, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
250.83	0.08	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
251.34	0.51	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
254.31	2.97	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
254.96	0.65	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
255.59	0.63	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
256.88	1.29	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
256.91	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
256.92	0.01	100		100% COAL, HEAVY DULL	
257.00	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
257.15	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
257.22	0.07	100		100% MUDSTONE	PEBBLY, GREY, MODERATELY WEAK ROCK.
257.33	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
257.44	0.11	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
258.25	0.81	100		100% SANDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
258.84	0.59	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
259.98	1.14	100		100% SANDSTONE,FINE GRAINED	MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
260.78	0.80	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
260.80	0.02	100		100% MUDSTONE	CARBONACEOUS, FISSILE, BLACK, SOFT.
260.85	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
260.86	0.01	100		100% MUDSTONE	BROWN, WEAK ROCK.
260.89	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
260.92	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
260.99	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK.
261.05	0.06	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, WEAK ROCK.
261.09	0.04	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
261.11	0.02	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, WEAK ROCK.
261.12	0.01	100		100% MUDSTONE	FISSILE, BROWN, WEAK ROCK.
261.27	0.15	100		100% SANDSTONE	CALCITIC, CREAM, MODERATELY WEAK ROCK.
261.43	0.16	100		100% MUDSTONE	CARBONACEOUS, BLACK, FIRM.
261.60	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
262.85	1.25	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
263.18	0.33	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
263.65	0.47	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
265.62	1.97	100		50% SANDSTONE 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, SILTSTONE, DARK GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
266.14	0.52	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
267.19	1.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
267.31	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
267.46	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
267.59	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
267.61	0.02	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
267.87	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
268.20	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, VERY WEAK ROCK.
268.48	0.28	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, VERY WEAK ROCK.
268.83	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
269.19	0.36	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
270.32	1.13	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
271.61	1.29	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
271.90	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
272.12	0.22	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH CARBONACEOUS WISPS.
274.08	1.96	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
276.60	2.52	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
276.72	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY-GREEN, MODERATELY WEAK ROCK.
278.13	1.41	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
279.95	1.82	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN, WITH MICA, MODERATELY WEAK ROCK.
280.95	1.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
281.45	0.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
284.02	2.57	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
284.45	0.43	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
285.05	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
285.25	0.20	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
285.35	0.10	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
285.72	0.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
285.77	0.05	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
286.91	1.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK.
288.08	1.17	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
288.14	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
288.26	0.12	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
288.77	0.51	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY WEAK ROCK.
290.07	1.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
290.10	0.03	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
290.36	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
291.81	1.45	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
291.96	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
292.30	0.34	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
293.00	0.70	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
293.23	0.23	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
293.75	0.52	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
293.89	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
294.08	0.19	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
294.12	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
294.16	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
294.19	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
294.29	0.10	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
294.42	0.13	100		100% SANDSTONE	ARGILLACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
294.54	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
294.67	0.13	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
294.84	0.17	100		100% MUDSTONE	ARENACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
295.07	0.23	100		100% SANDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
295.11	0.04	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
295.13	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
295.31	0.18	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
295.72	0.41	100		100% MUDSTONE	BADLY BROKEN, GREY.
296.25	0.53	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
296.43	0.18	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
296.45	0.02	100		100% MUDSTONE	FISSILE, BROWN, WEAK ROCK.
296.50	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
296.94	0.44	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
297.03	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK BROWN, MODERATELY WEAK ROCK.
297.13	0.10	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK, THINLY LAMINATED.
297.16	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
297.28	0.12	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
297.82	0.54	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
298.22	0.40	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
299.38	1.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
299.55	0.17	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
299.95	0.40	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
300.13	0.18	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
300.46	0.33	100		60% SANDSTONE 40% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-GREEN. MODERATELY WEAK ROCK, WITH MUD PELLETS.
300.51	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
300.56	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
300.70	0.14	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
300.71	0.01	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
300.82	0.11	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
301.22	0.40	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
301.67	0.45	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
301.76	0.09	100		100% SANDSTONE	MICACEOUS, ARGILLACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
301.89	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, WITH MUD PELLETS.
301.91	0.02	100		100% COAL, HEAVY DULL	
302.00	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
302.38	0.38	100		100% SILTSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
302.84	0.46	100		100% SILTSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
302.94	0.10	100		100% SANDSTONE,MEDIUM GRAINED	MICACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
302.95	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
303.21	0.26	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
303.51	0.30	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
304.04	0.53	100		100% SANDSTONE	SILTSTONE, BANDS, GREY-BROWN, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
304.30	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
304.39	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
304.44	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
305.21	0.77	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
305.25	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
305.34	0.09	100		100% SILTSTONE	ARENACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
305.63	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
305.73	0.10	100		100% MUDSTONE	BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
305.97	0.24	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK.
306.03	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
306.09	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
306.16	0.07	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
306.22	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
306.25	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
306.73	0.48	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
306.75	0.02	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT GREEN, MODERATELY WEAK ROCK.
307.03	0.28	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, LAMINATED.
307.05	0.02	100		100% COAL, BRIGHT	
307.25	0.20	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
307.48	0.23	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
307.57	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
307.67	0.10	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
307.77	0.10	100		100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
308.00	0.23	100		100% MUDSTONE	FRAGMENTS, BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
308.24	0.24	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.
308.81	0.57	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
320.25	11.44	100		100% SILTSTONE	BROWN, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	92.31 - 106.49 M	14.18 M
DC	0.00 M	116.28 - 121.42 M	5.14 M
DE	0.00 M	243.46 - 244.31 M	0.85 M
DE2	0.00 M	249.12 - 249.61 M	0.49 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 17

HOLE TYPE	CORE	
EASTING	598,000 M	GRID
NORTHING	5,381,600 M	GRID
ELEVATION	670.00 M	
TOTAL DEPTH DRILLED	605.73 M	
DRILLING STARTED	25/11/78	
DRILLING TIME		
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
9.00	9.00	0		CORE LOSS	
15.00	6.00	100		100% DOLERITE	MEDIUM GRAINED, BADLY BROKEN, GREY-GREEN, MODERATELY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
23.00	8.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH CALCITE ON JOINTS, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
23.70	0.70	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
28.80	5.10	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
37.70	8.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
52.70	15.00	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
59.52	6.82	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
61.80	2.28	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
83.10	21.30	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
83.30	0.20	100		100% DOLERITE	MEDIUM GRAINED, GREY-BROWN, MODERATELY STRONG ROCK, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
101.59	18.29	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH TALC ON JOINTS, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
104.65	3.06	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
106.60	1.95	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
111.45	4.85	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
112.60	1.15	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
114.25	1.65	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
123.10	8.85	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
134.20	11.10	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
138.10	3.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
155.00	16.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
168.90	13.90	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
174.30	5.40	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, WITH TALC ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
184.00	9.70	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
206.15	22.15	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
211.20	5.05	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
226.20	15.00	100		100% DOLERITE	MEDIUM GRAINED, GREY, WITH TALC ON JOINTS AND CHLORITE ON JOINTS, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
244.70	18.50	100		100% DOLERITE	MED.-FINE GRAINED, GREY-GREEN, WITH CHLORITE ON JOINTS, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
254.30	9.60	100		100% DOLERITE	FINE GRAINED, GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
254.90	0.60	100		100% DOLERITE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
255.00	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
256.90	1.90	100		100% MUDSTONE	ARENACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
260.10	3.20	100		100% MUDSTONE	CREAM, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG.
263.50	3.40	100		100% MUDSTONE	MODERATELY WEAK ROCK.
268.65	5.15	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
270.31	1.66	100		70% MUDSTONE 30% MUDSTONE	GREY. CARBONACEOUS, BLACK. MODERATELY WEAK ROCK, THINLY BEDDED, SHEARING AT BEDDING SEPARATION SURFACE.
270.70	0.39	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
271.07	0.37	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
271.37	0.30	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, MODERATELY WEAK ROCK.
272.16	0.79	100		80% MUDSTONE 20% MUDSTONE	SILTSTONE, GREY. CARBONACEOUS, BLACK. MODERATELY WEAK ROCK, THINLY BEDDED.
272.30	0.14	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, MODERATELY WEAK ROCK.
274.95	2.65	100		100% MUDSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
275.10	0.15	100		100% MUDSTONE	SANDSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK.
275.48	0.38	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, MODERATELY WEAK ROCK.
276.26	0.78	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED.
276.38	0.12	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
276.45	0.07	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
276.67	0.22	100		100% SILTSTONE	LAMINAE, GREY, MODERATELY WEAK ROCK.
277.03	0.36	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
277.12	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
277.72	0.60	65		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
277.75	0.03	100		100% CLAYSTONE	GREEN, MODERATELY WEAK ROCK.
277.84	0.09	100		100% CARBONACEOUS SHALE	BROWN-BLACK, MODERATELY WEAK ROCK.
278.06	0.22	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
278.36	0.30	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK, MODERATELY WEAK ROCK.
278.53	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
278.67	0.14	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
278.80	0.13	100		100% SILTSTONE	GREY-BROWN, MODERATELY STRONG ROCK.
278.90	0.10	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
279.07	0.17	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
279.83	0.76	100		100% SILTSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
279.92	0.09	100		100% MUDSTONE	BADLY BROKEN, GREY.
280.01	0.09	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
280.23	0.22	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
280.31	0.08	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK.
280.36	0.05	100		100% MUDSTONE	FISSILE, GREY-BROWN, WEAK ROCK.
280.65	0.29	65		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
280.93	0.28	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
282.70	1.77	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, VERY THINLY-BEDDED, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
283.01	0.31	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
283.60	0.59	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
283.72	0.12	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
284.53	0.81	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
284.89	0.36	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
285.20	0.31	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
285.86	0.66	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
287.21	1.35	90		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
287.54	0.33	100		100% CLAYSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, FIRM.
287.62	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
287.65	0.03	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
287.69	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
287.89	0.20	100		100% CARBONACEOUS SHALE	
287.95	0.06	100		100% CLAYSTONE	BROWN, FIRM.
288.00	0.05	100		100% CARBONACEOUS SHALE	
288.66	0.66	100		100% CARBONACEOUS SHALE	FISSILE, DARK GREY, WEAK ROCK.
288.77	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
288.83	0.06	100		100% CARBONACEOUS SHALE	COALY, BANDS, DARK GREY, MODERATELY WEAK ROCK.
289.11	0.28	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
289.21	0.10	100		100% SHALE	FISSILE, GREY, WEAK ROCK.
289.30	0.09	100		100% CARBONACEOUS SHALE	COALY, STREAKS, DARK GREY, MODERATELY WEAK ROCK.
289.32	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
289.47	0.15	100		100% MUDSTONE	COALY, LENSES, GREY, MODERATELY STRONG ROCK.
289.59	0.12	100		100% CARBONACEOUS SHALE	COALY, LENSES, DARK GREY, MODERATELY WEAK ROCK.
290.00	0.41	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
290.04	0.04	100		100% SHALE	FISSILE, GREY, WEAK ROCK.
290.07	0.03	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
290.10	0.03	100		100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.18	0.08	100		100% COAL, CANNEL	
290.24	0.06	100		100% CARBONACEOUS SHALE	COALY, BANDS, DARK GREY, MODERATELY STRONG ROCK.
290.29	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
290.42	0.13	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
290.85	0.43	100		100% SHALE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
291.10	0.25	100		100% SANDSTONE	FINE GRAINED, LITHIC, GREY, MODERATELY WEAK ROCK.
291.16	0.06	100		100% MUDSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK.
291.93	0.77	100		100% SANDSTONE	FINE GRAINED, GREY, MODERATELY STRONG ROCK.
292.04	0.11	100		100% SANDSTONE	LITHIC, MEDIUM GRAINED, GREY, MODERATELY WEAK ROCK.
292.93	0.89	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, MODERATELY WEAK ROCK.
293.23	0.30	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
293.28	0.05	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
293.40	0.12	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
293.51	0.11	100		100% SHALE	FISSILE, GREY, MODERATELY WEAK ROCK.
293.57	0.06	100		100% SANDSTONE	COALY, BANDS, GREY, MODERATELY STRONG ROCK.
295.08	1.51	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
295.77	0.69	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
295.95	0.18	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, GREY, MODERATELY STRONG ROCK.
296.12	0.17	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY STRONG ROCK.
296.17	0.05	100		100% SANDSTONE	SILTSTONE, BANDS, GREY, MODERATELY STRONG ROCK.
296.32	0.15	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
296.80	0.48	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
297.18	0.38	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
297.61	0.43	100		100% COBBLE CONGLOMERATE	MODERATELY STRONG ROCK.
299.62	2.01	100		100% SANDSTONE	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
300.70	1.08	100		100% SANDSTONE	CONGLOMERATIC, LITHIC, GREY, MODERATELY STRONG ROCK.
300.76	0.06	100		100% SANDSTONE	COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
300.80	0.04	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
303.00	2.20	100		100% SANDSTONE	COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
303.65	0.65	100		100% SANDSTONE	COALY, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
303.95	0.30	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
304.35	0.40	0		CORE LOSS	
304.75	0.40	100		100% SANDSTONE	SILTSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
305.25	0.50	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
305.26	0.01	100		100% COAL, BRIGHT	
305.50	0.24	100		100% SANDSTONE	MED.-COARSE GRAINED, SILTSTONE, LIGHT GREY, MODERATELY STRONG ROCK.
307.30	1.80	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
307.42	0.12	100		100% SILTSTONE	MODERATELY STRONG ROCK.
309.30	1.88	100		100% SANDSTONE	SILTSTONE, LAMINAE, LIGHT GREY, MODERATELY STRONG ROCK.
310.00	0.70	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
315.40	5.40	100		100% SANDSTONE	COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
315.65	0.25	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
316.25	0.60	100		100% SANDSTONE	FINE GRAINED, SILTSTONE, LIGHT GREY, MODERATELY STRONG ROCK.
316.30	0.05	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
316.60	0.30	100		100% MUDSTONE	GREY-GREEN, WEAK ROCK.
316.78	0.18	100		100% SHALE	FISSILE, GREY-GREEN, WEAK ROCK.
316.80	0.02	100		100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
316.94	0.14	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
318.00	1.06	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
319.35	1.35	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, MODERATELY STRONG ROCK.
319.96	0.61	100		100% SANDSTONE	FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
320.21	0.25	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY STRONG ROCK.
320.29	0.08	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
320.34	0.05	100		100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
320.47	0.13	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, GREY, MODERATELY WEAK ROCK.
320.59	0.12	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
320.69	0.10	100		100% COAL, HEAVY DULL	
324.20	3.51	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
324.30	0.10	100		100% SHALE	FISSILE, GREY, MODERATELY WEAK ROCK.
324.38	0.08	100		100% CLAYSTONE	WHITE, FIRM.
324.42	0.04	100		100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
326.14	1.72	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
326.74	0.60	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, MODERATELY STRONG ROCK.
327.04	0.30	100		100% SANDSTONE	FINE GRAINED, SILTSTONE, GREY, MODERATELY STRONG ROCK.
327.29	0.25	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
327.34	0.05	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
327.38	0.04	100		100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
327.48	0.10	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
327.94	0.46	100		100% MUDSTONE	SILTSTONE, VARIAGATED COLOUR, MODERATELY STRONG ROCK.
328.02	0.08	100		100% SILTSTONE	PEBBLY, MODERATELY STRONG ROCK.
328.51	0.49	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
328.71	0.20	100		100% CARBONACEOUS SHALE	BLACK.
328.77	0.06	100		100% COAL, HEAVY DULL	CALCITIC, CHERTY.
328.83	0.06	100		100% TONSTEIN	LIGHT BROWN, FIRM.
328.93	0.10	100		100% COAL, HEAVY DULL	
329.00	0.07	100		100% COAL, CANNEL	
329.25	0.25	100		100% COAL, HEAVY DULL	
329.28	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
329.30	0.02	100		100% COAL, HEAVY DULL	
329.40	0.10	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
329.45	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	
329.53	0.08	100		100% MUDSTONE	COALY, BANDS, GREY, MODERATELY STRONG ROCK.
329.64	0.11	100		100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
329.74	0.10	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
329.86	0.12	100		100% SHALE	FISSILE, GREY, WEAK ROCK.
330.92	1.06	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
334.10	3.18	100		100% SANDSTONE	FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
334.28	0.18	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
334.68	0.40	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
340.50	5.82	100		100% SANDSTONE	COARSE GRAINED, LITHIC, GREY, MODERATELY STRONG ROCK.
341.56	1.06	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK.
344.54	2.98	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
344.93	0.39	100		100% COAL, HEAVY DULL	
345.21	0.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
345.25	0.04	100		100% COAL, CANNEL	
345.41	0.16	100		100% COAL, HEAVY DULL	
345.46	0.05	100		100% COAL, CANNEL	
345.47	0.01	100		100% CARBONACEOUS SHALE	
345.54	0.07	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
345.55	0.01	100		100% COAL, CANNEL	
345.75	0.20	100		100% SANDSTONE	FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
345.95	0.20	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
347.55	1.60	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
350.69	3.14	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
350.74	0.05	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
350.91	0.17	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
351.01	0.10	100		100% COAL, CANNEL	
351.08	0.07	100		100% COAL, HEAVY DULL	
351.38	0.30	100		100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
352.20	0.82	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
353.82	1.62	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, MODERATELY STRONG ROCK.
355.10	1.28	100		100% SANDSTONE	FINE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
355.18	0.08	100		100% CLAYSTONE	LIGHT GREEN, FIRM.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
355.20	0.02	100		100% COAL, CANNEL	
355.40	0.20	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
355.46	0.06	100		100% COAL, CANNEL	
355.50	0.04	100		100% MUDSTONE	FISSILE, GREY.
355.54	0.04	100		100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
355.58	0.04	100		100% SHALE	FISSILE, LIGHT GREY.
355.85	0.27	100		100% CARBONACEOUS SHALE	DARK GREY.
355.91	0.06	100		100% COAL, CANNEL	
356.00	0.09	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
357.68	1.68	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
359.00	1.32	100		100% SILTSTONE	ARENACEOUS, GREY, MODERATELY STRONG ROCK.
359.20	0.20	80		60% SILTSTONE 40% MUDSTONE	GREY. LIGHT GREY. MODERATELY STRONG ROCK.
360.10	0.90	100		100% SILTSTONE	MUDSTONE, LAMINAE, GREY, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
360.40	0.30	100		100% MUDSTONE	TUFFACEOUS, LIGHT GREY, WEAK ROCK.
360.80	0.40	100		100% SILTSTONE	DARK GREY, MODERATELY STRONG ROCK.
362.56	1.76	100		100% MUDSTONE	COALY, BLACK, MODERATELY WEAK ROCK.
363.50	0.94	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
364.30	0.80	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
366.00	1.70	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY BEDDED, BEDS DIP 1 DEG.
366.30	0.30	100		100% MUDSTONE	COALY, LAMINAE, GREY, WEAK ROCK.
366.50	0.20	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
366.84	0.34	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
367.19	0.35			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
369.50	2.31	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
377.40	7.90	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
377.70	0.30	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
378.50	0.80	100		100% SANDSTONE	MEDIUM GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
379.14	0.64	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.
		TOP OF DALMAYNE B : 290.86 M R.L.			
379.18	0.04	100		100% COAL, BRIGHT	MUDSTONE, BANDS.
380.20	1.02	100		100% SANDSTONE	COALY, FRAGMENTS, GREY, MODERATELY STRONG ROCK.
380.23	0.03	100		100% COAL, HEAVY DULL	
380.33	0.10	100		100% SANDSTONE	FINE GRAINED, GREY.
380.36	0.03	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
380.45	0.09	100		100% MUDSTONE	GREY, VERY WEAK ROCK.
380.51	0.06	100		100% MUDSTONE	COALY, FRAGMENTS, DARK BROWN.
380.54	0.03	100		100% MUDSTONE	LIGHT BROWN.
380.68	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK.
380.81	0.13	100		100% CARBONACEOUS SHALE	
380.89	0.08	100		100% MUDSTONE	GREY-GREEN.
381.01	0.12	100		100% COAL, HEAVY DULL	
381.10	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
381.16	0.06	100		100% CARBONACEOUS SHALE	MODERATELY WEAK ROCK.
381.23	0.07	100		100% MUDSTONE	GREY-GREEN.
381.37	0.14	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
381.50	0.13	0		CORE LOSS	
381.92	0.42	100		100% MUDSTONE	CARBONACEOUS, COALY, BLACK.
381.96	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
		BASE OF DALMAYNE B : THICKNESS= 2.82 M; SAMPLED THICKNESS= 0.00 M			
382.14	0.18	100		100% MUDSTONE	TUFFACEOUS, GREY-BROWN, VERY WEAK ROCK.
382.28	0.14	100		100% MUDSTONE	CARBONACEOUS, BLACK.
382.31	0.03	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK.
382.44	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK.
382.48	0.04	100		100% MUDSTONE	LIGHT BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
382.52	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
382.65	0.13	100		100% COAL, BRIGHT WITH FEW DULL BANDS	CALCITIC, STREAKS.
382.69	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
				TOP OF DALMAYNE B : 287.31 M R.L.	
382.81	0.12	100		100% CARBONACEOUS MUDSTONE	
382.83	0.02	100		100% MUDSTONE	GREY.
382.97	0.14	100		100% COAL, HEAVY DULL	
382.98	0.01	100		100% CARBONACEOUS SHALE	
383.12	0.14	100		100% COAL, HEAVY DULL	
383.17	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
383.38	0.21	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
383.50	0.12	100		100% CARBONACEOUS SHALE	MODERATELY STRONG ROCK.
383.54	0.04	100		100% IRONSTONE	BROWN, VERY STRONG ROCK.
383.88	0.34	100		100% CARBONACEOUS SHALE	MODERATELY STRONG ROCK.
384.00	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
384.02	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK.
384.04	0.02	100		100% MUDSTONE	DARK BROWN.
384.14	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK.
384.26	0.12	100		100% COAL, DULL	BLACK.
384.27	0.01	100		100% MUDSTONE	DARK BROWN.
384.30	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
384.31	0.01	100		100% MUDSTONE	DARK BROWN.
384.33	0.02	100		100% COAL, BRIGHT	
384.50	0.17	100		100% COAL, HEAVY DULL	
384.79	0.29	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
384.97	0.18	100		100% COAL, INTERBANDED DULL AND BRIGHT	
385.10	0.13	100		100% COAL, HEAVY DULL	
385.13	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
385.29	0.16	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
385.31	0.02	100		100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
385.33	0.02	100		100% MUDSTONE	GREY.
385.35	0.02	100		100% CARBONACEOUS SHALE	
385.38	0.03	100		100% MUDSTONE	BROWN.
385.45	0.07	100		100% MUDSTONE	CARBONACEOUS, BLACK.
385.57	0.12	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
385.63	0.06	100		100% COAL, HEAVY DULL	
385.68	0.05	100		100% CARBONACEOUS SHALE	
385.72	0.04	100		100% MUDSTONE	BROWN.
385.96	0.24	100		100% COAL, HEAVY DULL	BLACK.
385.99	0.03	100		100% MUDSTONE	LIGHT BROWN.
386.05	0.06	100		100% COAL, HEAVY DULL	BLACK.
386.08	0.03	100		100% MUDSTONE	LIGHT BROWN.
386.11	0.03	100		100% COAL, HEAVY DULL	BLACK.
386.13	0.02	100		100% MUDSTONE	LIGHT BROWN.
386.30	0.17	100		100% MUDSTONE	CARBONACEOUS, BLACK.
				BASE OF DALMAYNE B : THICKNESS= 3.61 M; SAMPLED THICKNESS= 0.00 M	
387.50	1.20	100		100% MUDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
387.96	0.46	100		100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
389.78	1.82	100		50% SILTSTONE 50% SANDSTONE	GREY. FINE GRAINED, LIGHT GREY. MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
404.36	14.58	100		100% SANDSTONE	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
404.50	0.14	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
405.50	1.00	0		CORE LOSS	
406.79	1.29	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
407.39	0.60	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
408.46	1.07	100		100% COAL, DULL	BLACK.
408.62	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
408.70	0.08	100		50% SANDSTONE 50% SILTSTONE	FINE GRAINED, LIGHT GREY. GREY. MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
408.83	0.13	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
409.72	0.89	100		60% SILTSTONE 40% SANDSTONE	GREY. FINE GRAINED, LIGHT GREY. MODERATELY STRONG ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
409.85	0.13	100		100% SANDSTONE	MEDIUM GRAINED, CARBONACEOUS, LIGHT GREY.
409.88	0.03	100		100% IRONSTONE	BROWN, VERY STRONG ROCK.
				TOP OF DALMAYNE C : 260.12 M R.L.	
410.08	0.20	100		100% COAL, DULL	
410.09	0.01	100		100% CARBONACEOUS SHALE	
410.16	0.07	100		100% MUDSTONE	BROWN.
410.26	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK.
410.29	0.03	100		100% COAL, DULL	
410.69	0.40	100		100% COAL, HEAVY DULL	CALCITIC, STREAKS.
410.79	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
410.88	0.09	100		100% COAL, HEAVY DULL	
410.96	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
411.05	0.09	100		100% COAL, HEAVY DULL	
411.10	0.05	100		100% MUDSTONE	DARK GREY.
411.32	0.22	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
411.34	0.02	100		100% MUDSTONE	BROWN.
411.40	0.06	100		100% MUDSTONE	BROWN.
411.70	0.30	100		100% COAL, HEAVY DULL	BLACK.
411.81	0.11	100		100% COAL, HEAVY DULL	BLACK.
411.99	0.18	100		100% COAL, HEAVY DULL	FRAGMENTED.
412.02	0.03	100		100% CARBONACEOUS SHALE	
412.05	0.03	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN.
412.33	0.28	100		100% MUDSTONE	COALY, LAMINAE, GREY.
412.41	0.08	100		100% MUDSTONE	BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
412.51	0.10	100		100% MUDSTONE	DARK GREY.
412.65	0.14	100		100% COAL, HEAVY DULL	
412.73	0.08	100		100% MUDSTONE	GREY, WITH MUD PELLETS.
412.77	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK.
412.84	0.07	100		100% COAL, HEAVY DULL	
412.85	0.01	100		100% MUDSTONE	LIGHT BROWN.
412.97	0.12	100		100% COAL, HEAVY DULL	
413.00	0.03	100		100% COAL, BRIGHT	
413.03	0.03	100		100% COAL, HEAVY DULL	
413.20	0.17	100		100% MUDSTONE	LIGHT BROWN.
413.41	0.21	100		100% COAL, HEAVY DULL	BLACK.
413.44	0.03	100		100% MUDSTONE	GREY.
413.47	0.03	100		100% MUDSTONE	LIGHT BROWN.
413.53	0.06	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY.
413.58	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	CALCITIC, STREAKS.
				BASE OF DALMAYNE C : THICKNESS= 3.70 M; SAMPLED THICKNESS= 0.00 M	
413.84	0.26	100		100% SHALE	GREY.
414.70	0.86	100		100% MUDSTONE	GREY, WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
417.28	2.58	0		CORE LOSS	
417.66	0.38	100		100% SILTSTONE	FERRUGINOUS, GREY.
417.82	0.16	100		100% COAL, HEAVY DULL	SANDSTONE, BANDS.
419.30	1.48	100		100% SANDSTONE	MEDIUM GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
420.60	1.30	100		60% SANDSTONE 40% SILTSTONE	FINE GRAINED, LIGHT GREY. GREY. MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
421.75	1.15	100		100% MUDSTONE	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
429.10	7.35	100		100% SANDSTONE	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
430.40	1.30	100		100% SANDSTONE	LITHIC, LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
431.00	0.60	100		100% SANDSTONE	LITHIC, COALY, LIGHT GREY, MODERATELY STRONG ROCK.
431.07	0.07	100		100% MUDSTONE	COALY, FERRUGINOUS, BROWN, WEAK ROCK.
443.70	12.63	100		100% SANDSTONE	LITHIC, COALY, LIGHT GREY, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, .
444.08	0.38	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
444.50	0.42	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
455.11	10.61	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
455.79	0.68	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
456.60	0.81	100		100% SANDSTONE	MED.-COARSE GRAINED, FRAGMENTS, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
466.12	9.52	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
466.61	0.49	100		100% PEBBLE CONGLOMERATE	GREY, MODERATELY WEAK ROCK.
466.75	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE D UPPER : 203.25 M R.L.	
466.84	0.09	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
466.85	0.01	100	1	100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
466.94	0.09	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
466.97	0.03	100	1	100% MUDSTONE	ARENACEOUS, GREY, MODERATELY WEAK ROCK.
467.06	0.09	100	1	100% COAL, HEAVY DULL	BADLY BROKEN.
467.33	0.27	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN.
467.34	0.01	100	1	100% COAL, BRIGHT	
467.58	0.24	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
467.59	0.01	100	1	100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
467.96	0.37	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
468.05	0.09	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	MUDSTONE, LAMINAE.
468.08	0.03	100	1	100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
468.14	0.06	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
468.16	0.02	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
468.21	0.05	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
468.27	0.06	100	1	100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.52 M; SAMPLED THICKNESS= 1.52 M	
469.25	0.98	100		100% MUDSTONE	SILTSTONE, GREY, WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
471.13	1.88	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
473.18	2.05	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	LIGHT GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, LAMINATED.
476.18	3.00	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
476.60	0.42	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, GREY. MODERATELY WEAK ROCK, LAMINATED.
476.74	0.14	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
476.84	0.10	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
476.88	0.04	100		100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
476.94	0.06	100		100% SILTSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
477.30	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
477.47	0.17	100		100% LIMESTONE	MUDSTONE, LENSES, WHITE, MODERATELY STRONG ROCK.
477.86	0.39	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
480.35	2.49	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG.
480.36	0.01	100	2	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
480.49	0.13	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
480.59	0.10	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
480.85	0.26	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
480.86	0.01	100	2	100% MUDSTONE	GREY, WEAK ROCK, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
481.35	0.49	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WITH BANDS OF PYRITE, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
481.39	0.04	100	2	100% COAL, HEAVY DULL	
481.54	0.15	100	2	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
		TOP OF DALMAYNE D LOWER : 188.46 M R.L.			
482.23	0.69	100	3	100% COAL, HEAVY DULL	MUDSTONE, LENSES, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
482.24	0.01	100	3	100% MUDSTONE	ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
482.25	0.01	100	3	100% COAL, DULL	
482.26	0.01	100	3	100% COAL, BRIGHT	
482.27	0.01	100	3	100% MUDSTONE	ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
482.86	0.59	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
482.87	0.01	100	3	100% MUDSTONE	ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
482.88	0.01	100	3	100% COAL, BRIGHT WITH FEW DULL BANDS	
483.48	0.60	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH TALC ON JOINTS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
483.49	0.01	100	3	50% COAL, INTERBANDED DULL AND BRIGHT 50% MUDSTONE	CARBONACEOUS, DARK BROWN. MODERATELY WEAK ROCK, THICKLY LAMINATED.
		BASE OF DALMAYNE D LOWER : THICKNESS= 1.95 M; SAMPLED THICKNESS= 1.95 M			
483.73	0.24	100		100% MUDSTONE	BRIGHT COAL, LENSES, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
483.82	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
486.42	2.60	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, WEAK ROCK.
486.59	0.17	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
486.60	0.01	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
486.61	0.01	100		100% COAL, HEAVY DULL	
486.62	0.01	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, VERY WEAK ROCK.
487.03	0.41	100		100% COAL, HEAVY DULL	BRIGHT COAL, LAMINAE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
487.05	0.02	100		100% MUDSTONE	ARENACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
487.08	0.03	100		100% COAL, HEAVY DULL	
487.11	0.03	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
487.14	0.03	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES.
487.23	0.09	100		50% COAL, HEAVY DULL 50% COAL, BRIGHT	LAMINATED.
487.45	0.22	100		100% COAL, HEAVY DULL	
487.54	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
487.68	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
515.25	27.57	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
515.85	0.60	0		CORE LOSS	
515.88	0.03	100		100% CLAYSTONE	LIGHT BROWN, FIRM.
517.90	2.02	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
518.55	0.65	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, .
518.68	0.13	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
519.01	0.33	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
519.57	0.56	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
520.50	0.93	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
523.22	2.72	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
523.52	0.30	100		100% MUDSTONE	COALY, BANDS, DARK GREY, WEAK ROCK.
523.59	0.07	100		100% CARBONACEOUS SHALE	BADLY BROKEN.
524.25	0.66	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
524.62	0.37	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
524.67	0.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
524.84	0.17	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, SHEARING AT BEDDING SEPARATION SURFACE, WITH CROSS LAMINATION.
525.18	0.34	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
525.33	0.15	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
525.72	0.39	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
527.05	1.33	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. SILTSTONE, GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
527.50	0.45	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
527.53	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
527.64	0.11	100		100% MUDSTONE	ARENACEOUS, GREY, WEAK ROCK, THINLY LAMINATED.
527.74	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
527.89	0.15	100		100% CARBONACEOUS SHALE	
527.90	0.01	100		100% MUDSTONE	FRIABLE, LIGHT GREY, VERY WEAK ROCK.
528.52	0.62	100		100% CARBONACEOUS SHALE	
528.92	0.40	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
529.02	0.10	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
529.11	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
529.12	0.01	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
529.31	0.19	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
529.36	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
529.47	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
529.50	0.03	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
529.71	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
			TOP OF DALMAYNE E2 : 140.29 M R.L.		
530.10	0.39	100		100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
530.11	0.01	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN, MODERATELY WEAK ROCK.
530.57	0.46	100		100% COAL, HEAVY DULL	
530.68	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK, WITH MUD PELLETS.
530.85	0.17	100		100% COAL, HEAVY DULL	BRIGHT COAL, LAMINAE.
			BASE OF DALMAYNE E2 : THICKNESS= 1.14 M; SAMPLED THICKNESS= 0.00 M		

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
532.76	1.91	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
533.76	1.00	100		100% MUDSTONE	FRIABLE, BANDS, GREY, MODERATELY WEAK ROCK.
534.26	0.50	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
534.48	0.22	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
534.61	0.13	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
537.52	2.91	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED.
537.98	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
538.01	0.03	100		100% MUDSTONE	DARK GREY, WEAK ROCK, LAMINATED.
538.11	0.10	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
			TOP OF DALMAYNE E3 : 131.89 M R.L.		
538.20	0.09	100		100% COAL, HEAVY DULL	
538.22	0.02	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, WEAK ROCK.
538.44	0.22	100		100% COAL, HEAVY DULL	
			BASE OF DALMAYNE E3 : THICKNESS= 0.33 M; SAMPLED THICKNESS= 0.00 M		
538.48	0.04	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
538.49	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
538.50	0.01	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
538.51	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
538.79	0.28	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
541.48	2.69	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	CARBONACEOUS, LENSES, GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, MEDIUM BEDDED.
544.40	2.92	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
544.62	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
544.92	0.30	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
545.14	0.46	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
545.60	0.46	100		100% MUDSTONE	ARENACEOUS, LAMINAE, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
548.49	0.89	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
549.25	2.76	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
549.46	0.21	100		100% MUDSTONE	DARK GREY, SOFT.
550.83	1.37	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
552.03	1.20	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTSTONE, CARBONACEOUS, DARK GREY. GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
552.93	0.90	100		100% SANDSTONE,FINE GRAINED	FRIABLE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
561.74	8.81	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
563.04	1.30	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
563.60	0.56	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
570.14	6.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
570.18	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
570.29	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
570.40	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
570.76	0.36	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK, THICKLY LAMINATED.
574.61	3.85	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
574.83	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
574.87	0.04	100		100% COAL, HEAVY DULL	
575.00	0.13	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
577.40	2.40	80		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. MUDSTONE, LENSES, LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
577.63	0.23	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
579.40	1.77	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, VERY WEAK ROCK, THINLY LAMINATED.
582.30	2.90	100		100% SILTSTONE	FRIABLE, BANDS, GREY, WEAK ROCK, THINLY LAMINATED.
582.72	0.42	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
583.02	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
589.69	6.67	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
589.73	0.04	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
589.80	0.07	100		100% CARBONACEOUS SHALE	
591.06	1.26	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
592.05	0.99	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. SILTSTONE, LENSES, LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
592.69	0.64	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
592.99	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING, WITH CARBONACEOUS WISPS.
593.20	0.21	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
595.41	2.21	100		100% SILTSTONE	SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
595.62	0.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING, WITH CARBONACEOUS WISPS.
595.75	0.13	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
595.87	0.12	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEAK ROCK.
596.89	1.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
597.05	0.16	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK, WITH POOR SORTING.
597.17	0.12	100		100% MUDSTONE	BROWN, FIRM.
597.89	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING.
598.10	0.21	100		100% MUDSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
599.40	1.30	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH POOR SORTING, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
599.56	0.16	100		100% MUDSTONE	STRONGLY FRAGMENTED, GREY, WEAK ROCK.
599.70	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
600.08	0.38	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH POOR SORTING.
600.21	0.13	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
600.33	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
601.24	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, STREAKS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH POOR SORTING.
602.40	1.16	100		100% MUDSTONE	QUARTZITIC, FRAGMENTS, GREY, MODERATELY WEAK ROCK.
602.97	0.57	100		100% SILTSTONE	QUARTZITIC, FRAGMENTS, DARK GREY, MODERATELY WEAK ROCK.
603.35	0.38	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY-GREEN, MODERATELY WEAK ROCK.
603.48	0.13	100		100% PEBBLE CONGLOMERATE	GREY-GREEN, MODERATELY WEAK ROCK.
603.68	0.20	100		100% MUDSTONE	QUARTZITIC, FRAGMENTS, GREY, MODERATELY WEAK ROCK.
604.00	0.32	100		100% SILTSTONE	QUARTZITIC, FRAGMENTS, DARK GREY, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	379.14 - 381.96 M	2.82 M
DB	0.00 M	382.69 - 386.30 M	3.61 M
DC	0.00 M	409.88 - 413.58 M	3.70 M
DDU	1.52 M	466.75 - 468.27 M	1.52 M
DDL	1.95 M	481.54 - 483.49 M	1.95 M
DE2	0.00 M	529.71 - 530.85 M	1.14 M
DE3	0.00 M	538.11 - 538.44 M	0.33 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	466.75 - 466.27 M	1.52 M
2	480.35 - 481.54 M	1.19 M
3	481.54 - 483.49 M	1.95 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 18

HOLE TYPE	CORE	
EASTING	598,900 M	GRID
NORTHING	5,389,000 M	GRID
ELEVATION	490.00 M	
TOTAL DEPTH DRILLED	271.78 M	
DRILLING STARTED	01/01/79	
DRILLING TIME		
CORE SIZE		
HOLE SIZE	96.1 MM	
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 18

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
5.00	5.00	100		100% DOLERITE	PEBBLY, ORANGE-BROWN, HIGHLY WEATHERED.
12.30	7.30	100		100% DOLERITE	GREY-GREEN, MODERATELY WEATHERED.
13.00	0.70	100		100% CLAY	YELLOW-BROWN, HIGHLY WEATHERED, FIRM.
19.50	6.50	100		100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, MODERATELY WEATHERED, STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
21.50	2.00	100		100% DOLERITE	ORANGE-BROWN, HIGHLY WEATHERED.
44.00	22.50	100		100% DOLERITE	ARGILLACEOUS, YELLOW-BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
60.50	16.50	100		100% DOLERITE	ARGILLACEOUS, YELLOW-BROWN, HIGHLY WEATHERED.
60.65	0.15	100		100% MUDSTONE	ORANGE-BROWN, MODERATELY WEATHERED, WEAK ROCK.
60.95	0.30	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEATHERED, VERY WEAK ROCK.
61.04	0.09	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEATHERED, VERY WEAK ROCK.
61.56	0.52	100		100% MUDSTONE	FRAGMENTED, GREY, MODERATELY WEATHERED, VERY WEAK ROCK.
61.58	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEATHERED, VERY WEAK ROCK.
61.83	0.25	100		100% CLAY	FRAGMENTED, ORANGE, HIGHLY WEATHERED, FIRM.
62.06	0.23	100		100% MUDSTONE	FRAGMENTED, GREY, MODERATELY WEATHERED, VERY WEAK ROCK.
62.32	0.26	100		100% MUDSTONE	FRAGMENTED, GREY, UNWEATHERED, VERY WEAK ROCK.
62.44	0.12	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
63.60	1.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
63.90	0.30	100		100% MUDSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
64.50	0.60	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
64.74	0.24	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
64.82	0.08	100		100% MUDSTONE	FISSILE, GREY, VERY WEAK ROCK.
64.88	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
64.90	0.02	100		100% MUDSTONE	FISSILE, LIGHT GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.94	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, WEAK ROCK.
66.48	1.54	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, WEAK ROCK.
66.52	0.04	100		100% MUDSTONE	FISSILE, GREY, FIRM.
66.66	0.14	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
66.77	0.11	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT BROWN, WEAK ROCK.
66.86	0.09	100		100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK, .
68.00	1.14	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.44	0.44	100		100% SANDSTONE,FINE GRAINED	FISSILE, ARGILLACEOUS, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.50	0.06	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.61	0.11	100		100% SANDSTONE,FINE GRAINED	FISSILE, ARGILLACEOUS, LIGHT GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
68.85	0.24	100		100% CLAYSTONE	FISSILE, GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
69.62	0.77	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
69.77	0.15	100		70% MUDSTONE 30% SILTSTONE	FISSILE, DARK GREY. GREY. WEAK ROCK.
69.92	0.15	100		100% SILTSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
70.16	0.24	100		100% MUDSTONE	SILTSTONE, LENSES, GREY-BROWN, WEAK ROCK.
70.41	0.25	100		100% MUDSTONE	COALY, LENSES, BROWN, WEAK ROCK, WITH MUD PELLETS.
70.45	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, WEAK ROCK, WITH MUD PELLETS.
70.52	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
70.63	0.11	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
70.76	0.13	100		100% MUDSTONE	FISSILE, LIGHT BROWN, MODERATELY WEAK ROCK.
70.92	0.16	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
70.94	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
70.95	0.01	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, WEAK ROCK.
71.00	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
71.03	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
71.11	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
71.27	0.16	100		100% MUDSTONE	COALY, LENSES, DARK BROWN, MODERATELY STRONG ROCK.
71.30	0.03	100		100% MUDSTONE	FISSILE, LIGHT GREY, WEAK ROCK.
71.37	0.07	100		100% MUDSTONE	BRIGHT COAL, LENSES, DARK BROWN, MODERATELY STRONG ROCK.
71.53	0.16	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
71.57	0.04	100		100% CLAYSTONE	FISSILE, GREY, WEAK ROCK.
71.71	0.14	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
71.82	0.11	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
71.94	0.12	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
72.01	0.07	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
72.40	0.39	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
72.91	0.51	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK.
74.92	2.01	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
75.85	0.93	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
76.02	0.17	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, MODERATELY WEAK ROCK.
76.13	0.11	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN-BLACK, WEAK ROCK.
76.23	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
77.26	1.03	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
77.56	0.30	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
78.32	0.76	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
78.58	0.26	100		100% SILTSTONE	COALY, STREAKS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
79.00	0.42	100		100% SILTSTONE	DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
79.22	0.22	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.25	0.03	100		100% CLAYSTONE	CALCITIC, LIGHT GREEN, WEAK ROCK.
80.08	0.83	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
80.17	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
80.60	0.43	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
80.64	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
80.91	0.27	100		100% SILTSTONE	CARBONACEOUS, LENSES, DARK GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
81.00	0.09	100		100% MUDSTONE	FISSILE, BADLY BROKEN, DARK GREY, VERY WEAK ROCK.
81.10	0.10	100		100% MUDSTONE	ARENACEOUS, LENSES, DARK GREY, MODERATELY WEAK ROCK.
81.24	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
81.52	0.28	100		100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, MODERATELY WEAK ROCK.
81.74	0.22	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
82.24	0.50	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS, WITH LOAD CASTS.
82.44	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
82.76	0.32	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
82.81	0.05	100		100% MUDSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
82.85	0.04	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
82.90	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
83.00	0.10	100		100% MUDSTONE	FISSILE, BADLY BROKEN, GREY-BROWN, VERY WEAK ROCK.
83.83	0.83	100		100% SILTSTONE	GREY-GREEN, MODERATELY WEAK ROCK, LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
84.03	0.20	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
84.67	0.64	100		100% MUDSTONE	FISSILE, BANDS, GREY, MODERATELY WEAK ROCK.
85.40	0.73	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.59	0.19	100		100% SILTSTONE	ARENACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED.
85.75	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
85.92	0.17	100		100% MUDSTONE	GREY, WEAK ROCK, LAMINATED.
85.93	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
85.95	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
86.00	0.05	100		100% COAL, HEAVY DULL	
86.14	0.14	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
86.27	0.13	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
86.29	0.02	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, SOFT.
86.34	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
86.39	0.05	100		100% MUDSTONE	FISSILE, ARENACEOUS, GREY-BROWN, WEAK ROCK.
86.41	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
86.45	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
86.50	0.05	100		100% COAL, HEAVY DULL	
86.53	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH MUD PELLETS.
86.56	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
86.64	0.08	100		100% COAL, HEAVY DULL	
86.68	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
86.73	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
86.87	0.14	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
87.09	0.22	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
87.24	0.15	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
87.27	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
87.32	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
87.43	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
87.49	0.06	100		100% COAL, HEAVY DULL	
87.51	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
87.52	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
87.54	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
87.58	0.04	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
87.62	0.04	100		100% COAL, HEAVY DULL	
87.64	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
87.70	0.06	100		100% COAL, BRIGHT	BADLY BROKEN.
87.72	0.02	100		100% COAL, HEAVY DULL	
87.75	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
87.81	0.06	100		100% COAL, HEAVY DULL	
87.82	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
87.84	0.02	100		100% COAL, HEAVY DULL	
87.91	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
87.94	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
87.95	0.01	100		100% COAL, HEAVY DULL	
87.96	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	
88.02	0.06	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
88.03	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN.
88.14	0.11	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
88.16	0.02	100		100% COAL, DULL	
88.18	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
88.22	0.04	100		100% COAL, HEAVY DULL	
88.24	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
88.31	0.07	100		100% COAL, INTERBANDED DULL AND BRIGHT	
88.32	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, VERY WEAK ROCK.
88.34	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
88.38	0.04	100		100% COAL, HEAVY DULL	
88.41	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
88.48	0.07	100		100% MUDSTONE	COALY, STREAKS, BROWN, MODERATELY WEAK ROCK.
88.55	0.07	100		100% COAL, HEAVY DULL	
88.61	0.06	100		100% MUDSTONE	GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
88.63	0.02	100		100% COAL, BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
88.89	0.26	100		100% MUDSTONE	COALY, LENSES, DARK BROWN, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
88.98	0.09	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
89.10	0.12	100		100% COAL, HEAVY DULL	
89.16	0.06	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
89.25	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.29	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
89.38	0.09	100		100% MUDSTONE	SILTSTONE, DARK GREY, MODERATELY WEAK ROCK.
89.40	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
89.45	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.47	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
89.53	0.06	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.67	0.14	100		100% MUDSTONE	SILTSTONE, BROWN, MODERATELY WEAK ROCK.
89.77	0.10	100		100% CLAYSTONE	FISSILE, LIGHT BROWN, VERY WEAK ROCK.
89.78	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.80	0.02	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
89.81	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.82	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
89.83	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.85	0.02	100		100% MUDSTONE	FISSILE, LIGHT BROWN, MODERATELY WEAK ROCK.
89.88	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
89.95	0.07	100		100% COAL, HEAVY DULL	
90.00	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
90.03	0.03	100		100% COAL, DULL	
90.04	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
90.08	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
90.11	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
90.47	0.36	100		100% SILTSTONE	LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
90.49	0.02	100		100% SILTSTONE	CALCITIC, CREAM, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
91.75	1.26	100		100% SILTSTONE	ARENACEOUS, BANDS, GREY-GREEN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, .
93.58	1.83	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY-GREEN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
93.74	0.16	100		100% CLAYSTONE	LIGHT GREEN, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, .
93.77	0.03	100		100% CLAYSTONE	FISSILE, LIGHT GREEN, VERY WEAK ROCK.
95.68	1.91	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
95.89	0.21	100		100% MUDSTONE	BRIGHT COAL, LENSES, BROWN.
96.00	0.11	100		100% SILTSTONE	BROWN, MODERATELY WEAK ROCK.
99.59	3.59	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
99.66	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
101.97	2.31	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
101.99	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
102.06	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
102.23	0.17	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
102.26	0.03	100		100% MUDSTONE	SANDSTONE, LAMINAE, DARK GREY, MODERATELY WEAK ROCK, LAMINATED.
102.90	0.64	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
104.00	1.10	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY. CARBONACEOUS, STREAKS, LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
104.16	0.16	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
105.64	1.48	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
105.68	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.87	0.19	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, .
106.05	0.18	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
106.07	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
106.12	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, WITH MUD PELLETS.
106.14	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
106.20	0.06	100		100% CLAYSTONE	GREY-GREEN, STIFF.
106.31	0.11	100		100% COAL, DULL	
106.34	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
106.92	0.58	100		100% MUDSTONE	MICACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
108.88	1.96	100		100% CLAYSTONE	SILTSTONE, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
108.93	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
108.96	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
108.98	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
109.50	0.52	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH LOAD CASTS.
109.90	0.40	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL.
110.91	1.01	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
111.31	0.40	100		100% MUDSTONE	CARBONACEOUS, MICACEOUS, DARK GREY, MODERATELY WEAK ROCK.
111.43	0.12	100		100% MUDSTONE	SILTSTONE, MICACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
111.46	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
111.81	0.35	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
112.15	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
112.18	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
112.26	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
112.54	0.28	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
112.75	0.21	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
112.77	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
112.78	0.01	100		100% MUDSTONE	CARBONACEOUS, TRACES, LIGHT BROWN, MODERATELY WEAK ROCK.
112.81	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	
113.00	0.19	100		100% MUDSTONE	SILTSTONE, MICACEOUS, LIGHT BROWN, MODERATELY WEAK ROCK.
113.13	0.13	100		100% COAL, HEAVY DULL	
113.16	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
113.31	0.15	100		100% COAL, HEAVY DULL	
113.32	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
113.40	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
113.52	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
113.57	0.05	100		100% MUDSTONE	SILTSTONE, LIGHT BROWN, MODERATELY WEAK ROCK.
113.63	0.06	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
113.65	0.02	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
113.74	0.09	100		100% COAL, HEAVY DULL	
113.84	0.10	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
113.86	0.02	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
113.92	0.06	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, MODERATELY WEAK ROCK.
114.05	0.13	100		100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS.
114.07	0.02	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEAK ROCK.
114.08	0.01	100		100% COAL, HEAVY DULL	
114.12	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
114.15	0.03	100		100% COAL, HEAVY DULL	
114.20	0.05	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
114.23	0.03	100		100% COAL, HEAVY DULL	BRIGHT COAL, LENSES.
114.24	0.01	100		100% PYRITE	
114.41	0.17	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON CLEAT.
114.44	0.03	100		100% COAL, HEAVY DULL	
114.57	0.13	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
114.64	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
114.69	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
114.81	0.12	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
114.82	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
114.89	0.07	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
115.30	0.41	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
115.56	0.26	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
115.82	0.26	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
116.96	1.14	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
117.16	0.20	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
117.34	0.18	100		100% CLAYSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
119.60	2.26	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
122.14	2.54	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. LIGHT GREY. MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CROSS LAMINATION.
127.32	5.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
127.96	0.64	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
128.16	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
128.28	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
128.36	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
129.73	1.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
129.91	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
130.31	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
130.37	0.06	100		100% SILTSTONE	SANDSTONE, LAMINAE, GREY, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
137.20	6.83	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
137.66	0.46	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.

TOP OF DALMAYNE B : 352.34 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
137.77	0.11	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
137.83	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
137.96	0.13	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, WEAK ROCK.
138.20	0.24	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
138.74	0.54	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
138.77	0.03	100		100% MUDSTONE	BROWN-BLACK, MODERATELY STRONG ROCK.
138.83	0.06	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
139.22	0.39	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
139.35	0.13	100		100% MUDSTONE	LIGHT BROWN, STIFF.
139.51	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
139.65	0.14	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
139.68	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
139.77	0.09	100		100% COAL, HEAVY DULL	
139.95	0.18	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
140.40	0.45	100		100% CLAYSTONE	CREAM, STIFF, VERY STICKY.
140.64	0.24	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
141.09	0.45	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
141.18	0.09	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
141.24	0.06	100		100% COAL, HEAVY DULL	
143.30	2.06	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
143.47	0.17	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
143.72	0.25	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BROWN. WEAK ROCK, VERY THINLY BEDDED.
143.92	0.20	100		100% COAL, HEAVY DULL	DULL COAL, BANDS.
143.97	0.05	100		100% MUDSTONE	CARBONACEOUS, SIDERITIC, DARK BROWN, MODERATELY STRONG ROCK.
143.98	0.01	100		100% COAL, HEAVY DULL	
144.02	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
144.26	0.24	100		100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
144.27	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.35	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY STRONG ROCK.
144.46	0.11	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
144.48	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
144.51	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
144.60	0.09	100		100% COAL, HEAVY DULL	
144.66	0.06	100		50% MUDSTONE 50% COAL, BRIGHT	CARBONACEOUS, GREY-BROWN. MODERATELY WEAK ROCK, THINLY LAMINATED.
144.97	0.31	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK.
145.86	0.89	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
146.93	1.07	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
147.06	0.13	100		100% MUDSTONE	FISSILE, GREY, STIFF.
147.40	0.34	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
147.74	0.34	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. GREY. MODERATELY WEAK ROCK, THINLY LAMINATED.
148.54	0.80	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
148.56	0.02	100		100% LIMESTONE	CREAM, MODERATELY WEAK ROCK.
149.00	0.44	100		100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
149.08	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
149.31	0.23	100		100% COAL, DULL	
149.41	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
				BASE OF DALNAYNE B : THICKNESS= 11.75 M; SAMPLED THICKNESS= 0.00 M	
149.49	0.08	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, MODERATELY WEAK ROCK.
149.83	0.34	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, MODERATELY WEAK ROCK, WITH LOAD CASTS.
152.00	2.17	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
155.21	3.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
155.30	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
		TOP OF DALMAYNE C : 334.70 M R.L.			
155.98	0.68	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
156.16	0.18	100		50% MUDSTONE 50% MUDSTONE	SILTSTONE, BROWN. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THINLY LAMINATED.
156.68	0.52	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
157.01	0.33	100		70% MUDSTONE 30% MUDSTONE	SILTSTONE, BROWN. CARBONACEOUS, BROWN-BLACK. MODERATELY WEAK ROCK, THINLY LAMINATED.
161.01	4.00	100		80% MUDSTONE 20% CLAYSTONE	CARBONACEOUS, BROWN-BLACK. LIGHT BROWN. MODERATELY WEAK ROCK.
161.34	0.33	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
		BASE OF DALMAYNE C : THICKNESS= 6.04 M; SAMPLED THICKNESS= 0.00 M			
161.64	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, MODERATELY WEAK ROCK.
162.17	0.53	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
162.36	0.19	100		100% MUDSTONE	SANDSTONE, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
162.67	0.31	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT DEFORMED.
162.77	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
163.93	1.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
164.21	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
164.79	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
164.98	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
165.38	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
165.67	0.29	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
165.79	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
166.28	0.49	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
167.00	0.72	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
171.40	4.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
171.76	0.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
171.92	0.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
172.00	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
172.71	0.71	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
175.31	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
175.56	0.25	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
175.88	0.32	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
176.41	0.53	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
179.17	2.76	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
179.40	0.23	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
184.99	5.59	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
185.05	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, BROWN, MODERATELY WEAK ROCK.
188.59	3.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
188.69	0.10	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
190.21	1.52	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
190.59	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
191.36	0.77	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
192.36	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
192.70	0.34	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, MODERATELY WEAK ROCK.
194.27	1.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
194.48	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, MODERATELY WEAK ROCK.
195.87	1.39	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
196.83	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
197.01	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
197.83	0.82	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
199.55	1.72	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
205.32	5.77	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
206.12	0.80	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
206.20	0.08	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
206.52	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
207.59	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
209.11	1.52	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
210.54	1.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
212.69	2.15	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
213.90	1.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
214.89	0.99	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
215.75	0.86	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
216.09	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
216.69	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
217.85	1.16	100		100% SANDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
218.13	0.28	80		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
218.24	0.11	100		100% MUDSTONE	BRIGHT COAL, LENSES, GREY-BROWN, MODERATELY WEAK ROCK.
218.26	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEAK ROCK.
218.29	0.03	100		100% MUDSTONE	BROWN, FIRM, MODERATELY STICKY.
				TOP OF DALMAYNE D : 271.71 M R.L.	
218.47	0.18	100	1	100% COAL, DULL	
218.85	0.38	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
219.14	0.29	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE D : THICKNESS= 0.85 M; SAMPLED THICKNESS= 0.85 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
219.15	0.01	100		100% CARBONACEOUS SHALE	BRIGHT COAL, STREAKS.
219.49	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL.
219.68	0.19	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
219.74	0.06	100		100% MUDSTONE	GREY, SOFT.
221.29	1.55	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY WEAK ROCK, LAMINATED.
				TOP OF DALMAYNE D : 268.71 M R.L.	
222.21	0.92	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	CARBONACEOUS, LAMINAE.
222.80	0.59	50	2	100% COAL, DULL	BADLY BROKEN, BLACK.
				BASE OF DALMAYNE D : THICKNESS= 1.51 M; SAMPLED THICKNESS= 1.51 M	
222.82	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
224.00	1.18	50		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
227.55	3.55	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
227.60	0.05	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
228.06	0.46	100		100% SANDSTONE	MED.-COARSE GRAINED, CONGLOMERATIC, LIGHT GREY, MODERATELY WEAK ROCK.
229.64	1.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
236.94	7.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
237.17	0.23	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
238.87	1.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
239.10	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
240.85	1.75	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GRSY, MODERATELY WEAK ROCK.
240.91	0.06	100		100% MUDSTONE	SANDSTONE, LENSES, GREY, MODERATELY WEAK ROCK.
241.11	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
241.39	0.28	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
244.67	3.28	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
247.77	3.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.48	8.71	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
262.01	5.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
262.37	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, WITH BANDS OF CALCITE, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
263.18	0.81	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
264.28	1.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
265.45	1.17	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY WEAK ROCK.
265.47	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
265.76	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
265.79	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
265.90	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY-GREEN, MODERATELY WEAK ROCK, WITH MUD PELLETS.
266.00	0.10	100		100% COAL, HEAVY DULL	
269.11	3.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, LIGHT GREY, MODERATELY WEAK ROCK.
269.61	0.50	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
269.91	0.30	100		100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK.
270.11	0.20	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, WEAK ROCK.
271.00	0.89	100		100% MUDSTONE	SILTSTONE, BANDS, DARK GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	137.66 - 149.41 M	11.75 M
DC	0.00 M	155.30 - 161.34 M	6.04 M
DD	0.85 M	218.29 - 219.14 M	0.85 M
DD	1.51 M	221.29 - 222.80 M	1.51 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	218.29 - 219.14 M	0.85 M
2	221.29 - 222.80 M	1.51 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 19

HOLE TYPE	CORE
EASTING	598,000 M AM GRID
NORTHING	5,379,000 M AM GRID
ELEVATION	625.00 M
TOTAL DEPTH DRILLED	478.40 M
DRILLING STARTED	13/11/79
DRILLING TIME	
CORE SIZE	4.5 MM
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR/MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
250.28	250.28			100% DOLERITE	GREY.
264.00	13.72			100% SEDIMENTARY ROCK	GREY.
265.00	1.00			50% MUDSTONE 25% MUDSTONE 25% MUDSTONE	GREY. GREY-GREEN. RED-GREY.
266.00	1.00			45% MUDSTONE 30% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. GREY-GREEN. BLACK.
267.00	1.00			50% MUDSTONE 40% MUDSTONE 10% CARBONACEOUS MUDSTONE	 GREY-GREEN. BLACK.
268.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY-GREEN. RED-GREY BLACK.
269.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY-GREEN. RED-GREY.
270.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY-GREEN. RED-GREY.
271.00	1.00			50% MUDSTONE 50% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
272.00	1.00			50% MUDSTONE 50% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
273.00	1.00			100% MUDSTONE	GREY-GREEN.
274.00	1.00			75% MUDSTONE 25% MUDSTONE	GREY-GREEN. RED-GREY.
275.00	1.00			75% MUDSTONE 25% MUDSTONE	GREY-GREEN. RED-GREY.
276.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
277.00	1.00			45% MUDSTONE 40% MUDSTONE 15% CARBONACEOUS SHALE	RED-GREY. GREY-GREEN. BLACK.
278.00	1.00			45% MUDSTONE 40% MUDSTONE 15% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
279.00	1.00			45% MUDSTONE 40% MUDSTONE 15% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
280.00	1.00			100% MUDSTONE	GREY-GREEN.
281.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY. LIGHT GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
282.00	1.00			45% MUDSTONE 40% MUDSTONE 15% CARBONACEOUS SHALE	GREY. LIGHT GREEN. BLACK.
283.00	1.00			45% MUDSTONE 40% MUDSTONE 15% CARBONACEOUS SHALE	GREY. RED-GREY. BLACK.
284.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS SHALE	GREY. LIGHT GREEN. BLACK.
285.00	1.00			50% MUDSTONE 35% MUDSTONE 15% CARBONACEOUS SHALE	GREY. LIGHT GREEN. BLACK.
286.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
287.00	1.00			50% MUDSTONE 35% MUDSTONE 15% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
288.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS SHALE	GREY. LIGHT GREEN. BLACK.
289.00	1.00			60% MUDSTONE 30% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. LIGHT GREEN. BLACK.
290.00	1.00			75% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
291.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
292.00	1.00			75% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
293.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
294.00	1.00			70% MUDSTONE 20% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
295.00	1.00			50% MUDSTONE 25% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
296.00	1.00			60% MUDSTONE 30% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. RED-GREY. BLACK.
297.00	1.00			60% MUDSTONE 40% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
298.00	1.00			60% MUDSTONE 40% CARBONACEOUS SHALE	GREY-GREEN. BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
299.00	1.00			60% MUDSTONE 40% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
300.00	1.00			75% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
301.00	1.00			75% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
302.00	1.00			50% MUDSTONE 50% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
303.00	1.00			60% MUDSTONE 40% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
304.00	1.00			75% MUDSTONE 25% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
305.00	1.00			50% MUDSTONE 50% CARBONACEOUS SHALE	GREEN. BLACK.
306.00	1.00			100% MUDSTONE	GREY-GREEN.
307.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
308.00	1.00			50% MUDSTONE 50% GNEISS	GREY-GREEN. BLACK.
309.00	1.00			70% CARBONACEOUS SHALE 30% MUDSTONE	BLACK. GREY-GREEN.
310.00	1.00			60% CARBONACEOUS SHALE 40% MUDSTONE	BLACK. GREY-GREEN.
311.00	1.00			60% CARBONACEOUS SHALE 40% MUDSTONE	BLACK. GREY-GREEN.
312.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
313.00	1.00			60% MUDSTONE 40% SANDSTONE	GREY-GREEN. LIGHT GREY.
314.00	1.00			80% MUDSTONE 20% SANDSTONE	GREY-GREEN. LIGHT GREY.
315.00	1.00			90% MUDSTONE 10% SANDSTONE	GREY-GREEN. LIGHT GREY.
316.00	1.00			90% MUDSTONE 10% SANDSTONE	GREY-GREEN. LIGHT GREY.
317.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
318.00	1.00			90% MUDSTONE 10% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
319.00	1.00			80% MUDSTONE 20% SANDSTONE	GREY-GREEN. LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
320.00	1.00			90% MUDSTONE 10% SANDSTONE	GREY-GREEN. LIGHT GREY.
321.00	1.00			90% MUDSTONE 5% SANDSTONE 5% CARBONACEOUS SHALE	GREY-GREEN. LIGHT GREY. BLACK.
322.00	1.00			80% MUDSTONE 20% SANDSTONE	GREY-GREEN. LIGHT GREY.
323.00	1.00			80% MUDSTONE 20% SANDSTONE	GREY-GREEN. LIGHT GREY.
324.00	1.00			75% SANDSTONE 25% MUDSTONE	LIGHT GREY. GREY-GREEN.
325.00	1.00			75% SANDSTONE 25% MUDSTONE	LIGHT GREY. GREY-GREEN.
326.00	1.00			80% SANDSTONE 20% MUDSTONE	COALY, LIGHT GREY. GREY-GREEN.
327.00	1.00			80% SANDSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
328.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
329.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
330.00	1.00			90% SANDSTONE 10% MUDSTONE	COALY, LIGHT GREY. GREY-GREEN.
331.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
332.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
333.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
334.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
335.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
336.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
337.00	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY-GREEN.
338.00	1.00			85% SANDSTONE 15% MUDSTONE	LIGHT GREY. GREY-GREEN.
339.00	1.00			80% SANDSTONE 20% MUDSTONE	COALY, LIGHT GREY. GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
340.00	1.00			80% SANDSTONE 20% MUDSTONE	COALY, LIGHT GREY. GREY-GREEN.
341.00	1.00			75% SANDSTONE 25% MUDSTONE	LIGHT GREY. GREY-GREEN.
342.00	1.00			75% SANDSTONE 25% MUDSTONE	LIGHT GREY. GREY-GREEN.
343.00	1.00			50% SILTSTONE 50% MUDSTONE	LIGHT GREY. CARBONACEOUS, GREY-GREEN.
344.00	1.00			75% MUDSTONE 25% SILTSTONE	GREY-GREEN. LIGHT GREY.
345.00	1.00			75% MUDSTONE 25% SILTSTONE	GREY-GREEN. LIGHT GREY.
346.00	1.00			85% MUDSTONE 15% SILTSTONE	GREY-GREEN. LIGHT GREY.
347.00	1.00			70% SILTSTONE 30% MUDSTONE	LIGHT GREY. GREY-GREEN.
348.00	1.00			85% SILTSTONE 15% MUDSTONE	LIGHT GREY. GREY-GREEN.
349.00	1.00			85% SILTSTONE 15% MUDSTONE	LIGHT GREY. GREY-GREEN.
350.00	1.00			70% SILTSTONE 30% MUDSTONE	LIGHT GREY. GREY-GREEN.
351.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
352.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
353.00	1.00			75% SILTSTONE 25% MUDSTONE	LIGHT GREY. GREY-GREEN.
354.00	1.00			70% SILTSTONE 30% MUDSTONE	LIGHT GREY. GREY-GREEN.
355.00	1.00			70% SILTSTONE 25% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
356.00	1.00			80% SILTSTONE 10% MUDSTONE 10% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
357.00	1.00			85% SILTSTONE 15% MUDSTONE	LIGHT GREY. GREY-GREEN.
358.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
359.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
360.00	1.00			85% SILTSTONE 10% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
361.00	1.00			85% SILTSTONE 10% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
362.00	1.00			85% SILTSTONE 10% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
363.00	1.00			75% SILTSTONE 20% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
364.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
365.00	1.00			80% SILTSTONE 15% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. GREY-GREEN. BLACK.
366.00	1.00			80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY-GREEN.
367.00	1.00			90% MUDSTONE 10% SILTSTONE	GREY-GREEN. CARBONACEOUS, LIGHT GREY.
368.00	1.00			100% MUDSTONE	CARBONACEOUS, GREY-GREEN.
369.00	1.00			100% MUDSTONE	GREY-GREEN.
370.00	1.00			100% MUDSTONE	GREY-GREEN.
371.00	1.00			100% MUDSTONE	CARBONACEOUS, GREY-GREEN.
372.00	1.00			100% MUDSTONE	GREY-GREEN.
373.00	1.00			100% MUDSTONE	GREY-GREEN.
374.00	1.00			100% MUDSTONE	GREY-GREEN.
375.00	1.00			100% MUDSTONE	GREY-GREEN.
376.00	1.00			100% MUDSTONE	GREY-GREEN.
377.00	1.00			100% MUDSTONE	GREY-GREEN.
378.00	1.00			100% MUDSTONE	GREY-GREEN.
379.00	1.00			100% MUDSTONE	GREY-GREEN.
380.00	1.00			100% MUDSTONE	GREY-GREEN.
381.00	1.00			100% MUDSTONE	GREY-GREEN.
382.00	1.00			100% MUDSTONE	GREY-GREEN.
383.00	1.00			100% MUDSTONE	GREY-GREEN.
384.00	1.00			100% MUDSTONE	GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
385.00	1.00			100% MUDSTONE	GREY-GREEN.
386.00	1.00			100% MUDSTONE	GREY-GREEN.
387.00	1.00			100% MUDSTONE	GREY-GREEN.
388.00	1.00			100% MUDSTONE	GREY-GREEN.
389.00	1.00			100% MUDSTONE	GREY-GREEN.
390.00	1.00			100% MUDSTONE	GREY-GREEN.
391.00	1.00			100% MUDSTONE	GREY-GREEN.
392.00	1.00			100% MUDSTONE	GREY-GREEN.
393.00	1.00			100% MUDSTONE	GREY-GREEN.
394.00	1.00			100% MUDSTONE	GREY-GREEN.
395.00	1.00			100% MUDSTONE	GREY-GREEN.
396.00	1.00			80% MUDSTONE 20% CARBONACEOUS SHALE	GREY-GREEN. BLACK.
397.00	1.00			90% MUDSTONE 10% MUDSTONE	GREY-GREEN. RED-GREY.
398.00	1.00			100% MUDSTONE	GREY-GREEN.
399.00	1.00			100% MUDSTONE	GREY-GREEN.
400.00	1.00			100% MUDSTONE	GREY-GREEN.
401.00	1.00			100% MUDSTONE	GREY-GREEN.
402.00	1.00			100% MUDSTONE	GREY-GREEN.
403.00	1.00			100% MUDSTONE	GREY-GREEN.
404.00	1.00			100% MUDSTONE	GREY-GREEN.
405.00	1.00			100% MUDSTONE	GREY-GREEN.
406.00	1.00			90% MUDSTONE 10% MUDSTONE	GREY-GREEN. BLACK.
407.00	1.00			100% MUDSTONE	GREY-GREEN.
408.00	1.00			100% MUDSTONE	GREY-GREEN.
409.00	1.00			100% MUDSTONE	COALY, GREY-GREEN.
410.00	1.00			100% MUDSTONE	GREY-GREEN.
411.00	1.00			100% MUDSTONE	GREY-GREEN.
412.00	1.00			100% MUDSTONE	GREY-GREEN.
413.00	1.00			100% MUDSTONE	GREY-GREEN.
414.00	1.00			100% MUDSTONE	GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
415.00	1.00			100% MUDSTONE	GREY-GREEN.
416.00	1.00			100% MUDSTONE	GREY-GREEN.
417.00	1.00			100% MUDSTONE	GREY-GREEN.
418.00	1.00			100% MUDSTONE	GREY-GREEN.
419.00	1.00			100% MUDSTONE	GREY-GREEN.
420.00	1.00			100% MUDSTONE	GREY-GREEN.
421.00	1.00			100% MUDSTONE	GREY-GREEN.
422.00	1.00			100% MUDSTONE	GREY-GREEN.
423.00	1.00			100% MUDSTONE	GREY-GREEN.
424.00	1.00			100% MUDSTONE	GREY-GREEN.
425.00	1.00			100% MUDSTONE	GREY-GREEN.
426.00	1.00			100% MUDSTONE	GREY-GREEN.
427.00	1.00			100% MUDSTONE	GREY-GREEN.
428.00	1.00			100% MUDSTONE	GREY-GREEN.
429.00	1.00			100% MUDSTONE	GREY-GREEN.
430.00	1.00			100% MUDSTONE	GREY-GREEN.
431.00	1.00			100% MUDSTONE	GREY-GREEN.
432.00	1.00			100% MUDSTONE	GREY-GREEN.
433.00	1.00			100% MUDSTONE	GREY-GREEN.
434.00	1.00			100% MUDSTONE	GREY-GREEN.
435.00	1.00			100% MUDSTONE	GREY-GREEN.
436.00	1.00			100% MUDSTONE	GREY-GREEN.
437.00	1.00			100% MUDSTONE	GREY-GREEN.
438.00	1.00			100% MUDSTONE	GREY-GREEN.
439.00	1.00			100% MUDSTONE	GREY-GREEN.
440.00	1.00			100% MUDSTONE	GREY-GREEN.
441.00	1.00			100% MUDSTONE	CARBONACEOUS, GREY-GREEN.
442.00	1.00			100% MUDSTONE	GREY-GREEN.
443.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY. GREY-GREEN.
444.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY. GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
445.00	1.00			50% MUDSTONE 50% MUDSTONE	BLACK. GREY-GREEN.
446.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
447.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
448.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
449.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
450.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
451.00	1.00			50% MUDSTONE 45% MUDSTONE 5% COAL	BLACK. GREY-GREEN. BLACK.
452.00	1.00			50% MUDSTONE 30% MUDSTONE 20%	BLACK. GREY-GREEN. RED-GREY.
453.00	1.00			50% MUDSTONE 30% MUDSTONE 20%	BLACK. GREY-GREEN. RED-GREY.
454.00	1.00			50% MUDSTONE 30% MUDSTONE 20%	BLACK. GREY-GREEN. RED-GREY.
				*** CORE DESCRIPTION ***	
454.45	0.45			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
454.67	0.22			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
455.06	0.39			100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
456.96	1.90			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
457.02	0.06			100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
457.13	0.11			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
459.24	2.11			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
459.66	0.42			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
460.01	0.35			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
463.09	3.08			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
463.33	0.24			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
463.54	0.21			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
464.22	0.68			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
464.29	0.07			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
464.60	0.31			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
464.87	0.27			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
464.93	0.06			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
465.02	0.09			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
465.27	0.25			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
466.72	1.45			100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
469.99	3.27			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
470.15	0.16			100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
470.30	0.15			100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
474.16	3.86			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
474.18	0.02			100% CARBONACEOUS SHALE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
474.21	0.03			100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, STRONG ROCK.
474.27	0.06			100% CARBONACEOUS SHALE	GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
474.34	0.07			50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY. GREY-BROWN. UNWEATHERED, STRONG ROCK.
474.41	0.07			100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
478.23	3.82			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
478.40	0.17			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 20

HOLE TYPE	CORE
EASTING	599,600 M AM GRID
NORTHING	5,379,000 M AM GRID
ELEVATION	500.00 M
TOTAL DEPTH DRILLED	471.50 M
DRILLING STARTED	13/12/79
DRILLING TIME	
CORE SIZE	61.0 MM
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
9.21	9.21			50% DOLERITE 50% CLAY	SCREE, GREY. FERRUGINOUS, ORANGE-BROWN. COMPLETELY WEATHERED, SOFT.
34.34	25.13			100% DOLERITE	GREY, UNWEATHERED, VERY STRONG ROCK.
52.66	18.32			100% DOLERITE	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
162.00	109.34			100% DOLERITE	GREY, UNWEATHERED, VERY STRONG ROCK.
163.00	1.00			100% DOLERITE	CHLORITIC, DARK GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
164.00	1.00			50% DOLERITE 50% CARBONACEOUS SHALE	GREY. BAKED, DARK GREY.
165.00	1.00			100% SHALE	BAKED, GREY.
166.00	1.00			60% SHALE 40% SHALE	BAKED, GREY. BAKED, RED-BROWN.
167.00	1.00			70% SHALE 30% SHALE	BAKED, CARBONACEOUS, GREY. BAKED, RED-BROWN.
168.00	1.00			60% SHALE 40% CARBONACEOUS SHALE	GREY. DARK BROWN.
170.00	2.00			50% SHALE 50% CARBONACEOUS SHALE	GREY-BROWN. DARK BROWN.
171.00	1.00			60% SHALE 40% SHALE	GREY. CARBONACEOUS, TRACES, RED-BROWN.
172.00	1.00			80% SHALE 20% SHALE	CARBONACEOUS, TRACES, DARK GREY. RED-BROWN.
173.00	1.00			60% MUDSTONE 40% MUDSTONE	WAXY, GREY-GREEN. PINK-GREY.
178.00	5.00			70% MUDSTONE 30% MUDSTONE	WAXY, GREY-GREEN. PINK-GREY.
182.00	4.00			100% MUDSTONE	SILTSTONE, GREY-GREEN.
		TOP OF DALMAYNE A : 318.00 M R.L.			
184.00	2.00			90% MUDSTONE 10% COAL	GREY.
185.00	1.00			80% MUDSTONE 20% COAL	GREY.
187.00	2.00			70% MUDSTONE 30% COAL	GREY.
188.00	1.00			90% MUDSTONE 10% COAL	GREY.
189.00	1.00			80% MUDSTONE 20% COAL	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF DALMAYNE A : THICKNESS= 7.00 M; SAMPLED THICKNESS= 0.00 M	
190.00	1.00			80% SANDSTONE,FINE GRAINED 20% COAL	ARGILLACEOUS, GREY.
191.00	1.00			90% SANDSTONE,FINE GRAINED 10% COAL	ARGILLACEOUS, GREY.
196.00	5.00			100% SANDSTONE,FINE GRAINED	COALY, TRACES, GREY.
197.00	1.00			70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS SHALE	GREY. DARK GREY.
200.00	3.00			100% CARBONACEOUS SHALE	DARK GREY.
203.00	3.00			100% CARBONACEOUS SHALE	DARK GREY.
205.00	2.00			50% SILTSTONE 50% MUDSTONE	GREY. CARBONACEOUS, DARK GREY.
209.00	4.00			70% CARBONACEOUS SHALE 30% MUDSTONE	DARK GREY. SILTSTONE, GREY.
211.00	2.00			80% CARBONACEOUS SHALE 20% MUDSTONE	DARK GREY. LIGHT GREY.
212.00	1.00			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
213.00	1.00			100% MUDSTONE	GREY.
214.00	1.00			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
215.00	1.00			60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, TRACES, DARK GREY. RED-BROWN.
216.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY-GREEN. RED-BROWN.
217.00	1.00			80% MUDSTONE 20% MUDSTONE	GREY-GREEN. RED-BROWN.
218.00	1.00			80% SILTSTONE 20% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, LIGHT GREY.
219.00	1.00			100% SANDSTONE,FINE GRAINED	LIGHT GREY.
220.00	1.00			80% SANDSTONE 20% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, GREY. GREY.
222.00	2.00			100% SANDSTONE,COARSE GRAINED	GREY.
223.00	1.00			80% SANDSTONE,COARSE GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
224.00	1.00			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS SHALE	GREY. DARK GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
225.00	1.00			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
226.00	1.00			70% CARBONACEOUS MUDSTONE 30% MUDSTONE	DARK GREY. RED-BROWN.
227.00	1.00			50% MUDSTONE 50% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, TRACES, GREY. GREY.
228.00	1.00			60% SILTSTONE 40% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
229.00	1.00			50% SILTSTONE 50% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
230.00	1.00			60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY.
233.00	3.00			60% SILTSTONE 40% MUDSTONE	GREY. CARBONACEOUS, TRACES, DARK GREY.
234.00	1.00			80% SILTSTONE 20% MUDSTONE	CARBONACEOUS, TRACES, BROWN. BENTONITIC, LIGHT BROWN.
235.00	1.00			70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, DARK BROWN. GREY-BROWN.
236.00	1.00			70% SILTSTONE 30% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
237.00	1.00			70% SILTSTONE 30% MUDSTONE	GREY. BLUE-GREY.
238.00	1.00			70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, TRACES, GREY. VARIAGATED COLOUR.
239.00	1.00			60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY-BROWN. DARK BROWN.
240.00	1.00			80% MUDSTONE 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
241.00	1.00			50% MUDSTONE 50% MUDSTONE	GREY. VARIAGATED COLOUR.
242.00	1.00			70% MUDSTONE 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK GREY.
243.00	1.00			90% SHALE 10% MUDSTONE	GREY. VARIAGATED COLOUR.
244.00	1.00			90% SILTSTONE 10% MUDSTONE	GREY. CARBONACEOUS, TRACES, DARK BROWN.
245.00	1.00			50% SILTSTONE 50% MUDSTONE	GREY. RED-BROWN.
246.00	1.00			60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, DARK BROWN. GREY.
247.00	1.00			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
248.00	1.00			80% SILTSTONE 20% MUDSTONE	GREY. CARBONACEOUS, DARK BROWN.
249.00	1.00			80% CARBONACEOUS MUDSTONE 20% SILTSTONE	DARK BROWN. GREY.
250.00	1.00			70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY.
251.00	1.00			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY.
252.00	1.00			70% MUDSTONE 30% MUDSTONE	GREY. CARBONACEOUS, BROWN.
253.00	1.00			100% SHALE	GREY.
254.00	1.00			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY-BROWN.
255.00	1.00			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY-BROWN.
257.00	2.00			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY-BROWN.
258.00	1.00			70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
259.00	1.00			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, TRACES, GREY-BROWN.
260.00	1.00			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. CARBONACEOUS, TRACES, DARK GREY.
261.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY.
263.00	2.00			70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, GREY-BROWN. GREY.
264.00	1.00			100% SANDSTONE,MEDIUM GRAINED	GREY.
265.00	1.00			90% MUDSTONE 10% CARBONACEOUS MUDSTONE	LIGHT BROWN. BLACK.
266.00	1.00			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
267.00	1.00			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
268.00	1.00			80% MUDSTONE 20% MUDSTONE	COALY, BLACK. LIGHT BROWN.
269.00	1.00			60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
270.00	1.00			70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
271.00	1.00			70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
273.00	2.00			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
274.00	1.00			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
275.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. CARBONACEOUS, TRACES, DARK GREY.
276.00	1.00			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. CARBONACEOUS, DARK GREY.
277.00	1.00			100% SANDSTONE,MEDIUM GRAINED	GREY.
278.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
279.00	1.00			50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
280.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
281.00	1.00			50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY.
282.00	1.00			90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, GREY. GREY.
294.00	12.00			100% SANDSTONE,COARSE GRAINED	GREY.
295.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
296.00	1.00			90% SANDSTONE,FINE GRAINED 10% MUDSTONE	GREY. CARBONACEOUS, DARK BROWN.
297.00	1.00			50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, TRACES, BROWN.
298.00	1.00			70% SHALE 30% SANDSTONE	GREY-BROWN. VERY FINE GRAINED, GREY.
299.00	1.00			70% SHALE 30% MUDSTONE	GREY. CARBONACEOUS, DARK BROWN.
300.00	1.00			60% SHALE 40% CARBONACEOUS SHALE	GREY. DARK BROWN.
302.00	2.00			50% SHALE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, GREY-BROWN. GREY.
303.00	1.00			80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN. BENTONITIC, WHITE.
304.00	1.00			70% SANDSTONE 30% SHALE	VERY FINE GRAINED, GREY. GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
305.00	1.00			60% SHALE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, GREY-BROWN. GREY.
306.00	1.00			50% SHALE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN. GREY.
307.00	1.00			100% MUDSTONE	CARBONACEOUS, BROWN.
308.00	1.00			80% CARBONACEOUS MUDSTONE 20% MUDSTONE	DARK BROWN. RED-BROWN.
309.00	1.00			60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN. GREY-BROWN.
310.00	1.00			80% MUDSTONE 20% MUDSTONE	GREY-BROWN. CARBONACEOUS, BROWN.
311.00	1.00			90% MUDSTONE 10% COAL	CARBONACEOUS, DARK BROWN. FRAGMENTS.
312.00	1.00			95% SILTSTONE 5% COAL	ARGILLACEOUS, GREY. FRAGMENTS.
313.00	1.00			70% SILTSTONE 30% CARBONACEOUS MUDSTONE	ARGILLACEOUS, GREY. DARK BROWN.
314.00	1.00			80% MUDSTONE 20% COAL	SILTSTONE, GREY. FRAGMENTS.
315.00	1.00			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS, DARK BROWN.
316.00	1.00			80% SANDSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS, DARK BROWN.
317.00	1.00			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS, DARK BROWN.
318.00	1.00			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS, DARK BROWN.
319.00	1.00			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS, DARK BROWN.
320.00	1.00			80% SILTSTONE 20% COAL	ARGILLACEOUS, LIGHT GREY. FRAGMENTS.
323.00	3.00			90% SANDSTONE 10% COAL	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS.
324.00	1.00			80% SANDSTONE 20% COAL	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS.
325.00	1.00			90% SANDSTONE 10% COAL	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. FRAGMENTS.
326.00	1.00			80% SANDSTONE 20% MUDSTONE	VERY FINE GRAINED, ARGILLACEOUS, LIGHT GREY. COALY, FRAGMENTS, DARK BROWN.

TOP OF DALMAYNE B : 174.00 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
327.00	1.00			60% MUDSTONE 40% COAL	COALY, DARK BROWN. MID LUSTROUS-DULL COAL.
328.00	1.00			70% COAL 30% COAL	MID LUSTROUS-DULL COAL.
329.00	1.00			70% MUDSTONE 30% COAL	GREY-BROWN. MID LUSTROUS-DULL COAL.
330.00	1.00			60% MUDSTONE 40% COAL	GREY-BROWN. MID LUSTROUS-DULL COAL.
332.00	2.00			90% MUDSTONE 10% COAL	GREY-BROWN.
333.00	1.00			50% MUDSTONE 50% COAL	GREY. MID LUSTROUS-DULL COAL.
335.00	2.00			60% MUDSTONE 40% COAL	GREY-BROWN. MID LUSTROUS-DULL COAL.
				BASE OF DALMAYNE B : THICKNESS= 9.00 M; SAMPLED THICKNESS= 0.00 M	
336.00	1.00			70% SILTSTONE 30% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
337.00	1.00			60% SILTSTONE 40% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
339.00	2.00			90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
345.00	6.00			90% SANDSTONE,FINE GRAINED 10% COAL	GREY. FRAGMENTS.
347.00	2.00			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, TRACES, GREY.
361.00	14.00			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS.
				TOP OF DALMAYNE C : 139.00 M R.L.	
362.00	1.00			70% COAL, DULL WITH FEW BRIGHT BANDS 30% MUDSTONE	GREY-BROWN.
363.00	1.00			80% MUDSTONE 20% COAL	GREY-BROWN. MID LUSTROUS-DULL COAL.
				BASE OF DALMAYNE C : THICKNESS= 2.00 M; SAMPLED THICKNESS= 0.00 M	
364.00	1.00			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, MID LUSTROUS-DULL COAL.
372.00	8.00			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS, MID LUSTROUS-DULL COAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
376.00	4.00			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, DARK BROWN.
378.00	2.00			95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, DARK BROWN.
380.00	2.00			80% SANDSTONE,COARSE GRAINED 20% COAL	GREY. FRAGMENTS, MID LUSTROUS-DULL COAL.
382.00	2.00			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, MID LUSTROUS-DULL COAL.
383.00	1.00			80% SANDSTONE,MEDIUM GRAINED 20% COAL	GREY. FRAGMENTS.
384.50	1.50			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, MID LUSTROUS-DULL COAL.
				*** CORE DESCRIPTION ***	
385.68	1.18			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
386.34	0.66			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. PELLETAL, GREY-BROWN. MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
387.50	1.16			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
391.44	3.94			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
392.76	1.32			100% MUDSTONE	CARBONACEOUS, TRACES, DARK GREY, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG.
392.91	0.15			80% SANDSTONE 20% MUDSTONE	MED.-COARSE GRAINED, GREY. PELLETAL, GREY-BROWN. STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
393.48	0.57			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
395.30	1.82			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
395.31	0.01			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
396.47	1.16			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. PELLETAL, GREY. STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
396.55	0.08			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS MUDSTONE	GREY. STREAKS, BLACK. STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
401.79	5.24			100% SANDSTONE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 5 DEG.
405.50	3.71			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
408.50	3.00			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. STREAKS. STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
409.53	1.03			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
410.52	0.99			100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG.
410.55	0.03			100% COAL, DULL	LENSES, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
410.66	0.11			60% SANDSTONE,COARSE GRAINED 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, PELLETAL, DARK GREY. STRONG ROCK.
411.06	0.40			100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
414.50	3.44			90% SANDSTONE,COARSE GRAINED 10% CARBONACEOUS MUDSTONE	LIGHT GREY. COALY, STREAKS. STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
416.70	2.20			80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. COALY, LAMINAE. STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG.
417.50	0.80			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
418.56	1.06			100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG.
419.71	1.15			100% CARBONACEOUS MUDSTONE	FRIABLE, DARK GREY, VERY WEAK ROCK.
420.51	0.80			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
423.50	2.99			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. STREAKS. STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG.
426.50	3.00			90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, GREY. STREAKS. MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
429.50	3.00			90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, GREY. STREAKS. MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 5 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
432.53	3.03			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, GREY. STREAKS. STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
432.95	0.42			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. STREAKS, DARK BROWN. MODERATELY STRONG ROCK.
433.49	0.54			100% MUDSTONE	GREY-BROWN, WEAK ROCK.
434.04	0.55			100% MUDSTONE	CARBONACEOUS, DARK GREY.
434.16	0.12			90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, DARK GREY. FRAGMENTS, DARK GREY.
434.35	0.19			90% MUDSTONE 10% COAL	CARBONACEOUS, GREY. LENSES.
		TOP OF DALMAYNE D LOWER : 65.65 M R.L.			
434.45	0.10		1====	100% COAL, HEAVY DULL	
434.60	0.15		1====	100% COAL, DULL	
434.63	0.03		1====	100% MUDSTONE	BROWN, MODERATELY STRONG ROCK.
434.75	0.12		1====	100% COAL, HEAVY DULL	
435.37	0.62		1====	90% COAL, DULL 10% CALCITE	BANDS.
435.38	0.01		1====	100% SANDSTONE	GREY.
435.45	0.07		1====	100% COAL, DULL	
435.47	0.02		1====	100% MUDSTONE	BROWN.
435.56	0.09		1====	100% COAL, DULL	MUDSTONE, PARTINGS.
436.00	0.44		1====	100% COAL, DULL	SHALY, PARTINGS.
436.02	0.02		1====	100% MUDSTONE	CARBONACEOUS, DARK BROWN.
436.26	0.24		1====	100% COAL, DULL	SHALY, PARTINGS.
436.29	0.03		1====	100% COAL, BRIGHT	
436.41	0.12		1====	100% COAL, DULL	SHALY, PARTINGS, WITH CALCITE ON FRACTURES.
		BASE OF DALMAYNE D LOWER : THICKNESS= 2.06 M; SAMPLED THICKNESS= 2.06 M			
436.44	0.03		2====	90% MUDSTONE 10% CARBONACEOUS MUDSTONE	DARK GREY. LENSES.
436.48	0.04		2====	100% MUDSTONE	LIGHT BROWN, MODERATELY STRONG ROCK.
436.52	0.04		2====	100% COAL, DULL	CARBONACEOUS, PARTINGS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
436.62	0.10		2====	100% MUDSTONE	CARBONACEOUS, DARK GREY.
436.71	0.09		2====	100% MUDSTONE	GREY.
436.86	0.15		2====	90% CARBONACEOUS SHALE 10% COAL	DARK GREY. BANDS.
438.18	1.32		2====	100% MUDSTONE	LAMINAE, GREY.
438.19	0.01		2====	100% COAL, BRIGHT	
438.24	0.05		2====	100% MUDSTONE	GREY.
		TOP OF DALMAYNE D LOWER : 61.76 M R.L.			
438.26	0.02		3====	100% COAL, DULL	
438.27	0.01		3====	100% MUDSTONE	BROWN.
438.42	0.15		3====	100% COAL, DULL	
438.50	0.08		3====	80% COAL, HEAVY DULL 20% COAL, BRIGHT	BANDS.
438.69	0.19		3====	100% COAL, DULL	
438.71	0.02		3====	100% MUDSTONE	BROWN.
438.78	0.07		3====	100% COAL, DULL	
438.79	0.01		3====	100% CARBONACEOUS MUDSTONE	
438.84	0.05		3====	100% COAL, DULL	
438.86	0.02		3====	100% MUDSTONE	BROWN.
438.95	0.09		3====	100% COAL, DULL	
441.41	2.46			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
444.44	3.03			100% MUDSTONE	SILTSTONE, GREY.
444.53	0.09			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
444.54	0.01			100% MUDSTONE	FRIABLE, LIGHT BROWN.
444.57	0.03			100% CARBONACEOUS MUDSTONE	BLACK.
444.61	0.04			100% COAL, DULL	
		BASE OF DALMAYNE D LOWER : THICKNESS= 6.37 M; SAMPLED THICKNESS= 0.71 M			
444.83	0.22			100% MUDSTONE	GREY.
446.18	1.35			100% SILTSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
447.50	1.32			100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG.
450.56	3.06			100% SANDSTONE,COARSE GRAINED	MASSIVE, GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG.
453.50	2.94			95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, MASSIVE, GREY. FRAGMENTS.
456.76	3.26			100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
456.80	0.04			100% CARBONACEOUS SHALE	BLACK, STRONG ROCK.
456.86	0.06			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY-GREEN. BLACK.
456.92	0.06			95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	GREY-GREEN. TRACES, DARK BROWN.
457.48	0.56			80% SANDSTONE,COARSE GRAINED 20% COAL, DULL	GREY-GREEN. LENSES, FRAGMENTS.
458.59	1.11			100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, MODERATELY STRONG ROCK.
458.61	0.02			90% CARBONACEOUS MUDSTONE 10% CALCITE	DARK BROWN. FRAGMENTS, WHITE. WEAK ROCK.
459.50	0.89			100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, MODERATELY STRONG ROCK.
462.51	3.01			95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY. STREAKS, DARK BROWN. MODERATELY STRONG ROCK.
464.26	1.75			100% SANDSTONE,COARSE GRAINED	MASSIVE, GREY, MODERATELY STRONG ROCK.
464.64	0.38			100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
464.76	0.12			60% CARBONACEOUS MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	DARK BROWN. GREY. MODERATELY WEAK ROCK.
466.74	1.98			80% SANDSTONE,MEDIUM GRAINED 20% COAL	MASSIVE, GREY-GREEN. STREAKS, BLACK.
468.47	1.73			100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
468.50	0.03			100% SANDSTONE	MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
470.14	1.64			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
470.17	0.03			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, WEAK ROCK.
470.18	0.01			100% CARBONACEOUS MUDSTONE	BLACK, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
471.50	1.32			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, DARK GREY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DA	0.00 M	182.00 - 189.00 M	7.00 M
DB	0.00 M	326.00 - 335.00 M	9.00 M
DC	0.00 M	361.00 - 363.00 M	2.00 M
DDL	2.06 M	434.35 - 436.41 M	2.06 M
DDL	0.71 M	438.24 - 444.61 M	6.37 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1====	434.35 - 436.41 M	2.06 M
2====	436.41 - 438.24 M	1.83 M
3====	438.24 - 438.95 M	0.71 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 21

HOLE TYPE	CORE
EASTING	601,700 M AM GRID
NORTHING	5,377,800 M AM GRID
ELEVATION	430.00 M
TOTAL DEPTH DRILLED	308.40 M
DRILLING STARTED	18/12/79
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

BOREHOLE : GY 21

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.00	3.00			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
6.00	3.00			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, WITH CRYSTALLINE PYRITE, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
8.00	2.00			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
11.00	3.00			100% DOLERITE	SCREE, GREY-BROWN, COMPLETELY WEATHERED.
14.00	3.00			100% DOLERITE	SCREE, GREY-BROWN, COMPLETELY WEATHERED.
17.00	3.00			70% DOLERITE 30% DOLERITE	SCREE, BROWN. SCREE, GREY.
20.00	3.00			100% DOLERITE	SCREE, MED.-COARSE GRAINED, BROWN, COMPLETELY WEATHERED.
21.68	1.68			100% DOLERITE	SCREE, BROWN, COMPLETELY WEATHERED.
22.86	1.18			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
23.00	0.14			100% DOLERITE	SCREE, RED-BROWN, COMPLETELY WEATHERED, SOFT.
25.15	2.15			100% DOLERITE	SCREE, GREY-BROWN, COMPLETELY WEATHERED.
26.00	0.85			100% DOLERITE	SCREE, GREY, MODERATELY WEATHERED, STRONG ROCK.
27.45	1.45			100% DOLERITE	SCREE, RED-BROWN, COMPLETELY WEATHERED, SOFT.
27.59	0.14			100% MUDSTONE	BROWN, VERY WEAK ROCK.
27.90	0.31			100% MUDSTONE	LIGHT GREY, VERY SOFT, VERY STICKY.
27.98	0.08			100% MUDSTONE	CARBONACEOUS, TRACES, PINK-GREY, VERY SOFT, MODERATELY STICKY.
28.20	0.22			100% MUDSTONE	GREY-BROWN, VERY SOFT, WITH MUD PELLETS, VERY STICKY.
28.22	0.02			100% MUDSTONE	COALY, BLACK, STIFF.
28.32	0.10			100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY SOFT, VERY STICKY.
28.36	0.04			100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
28.54	0.18			100% MUDSTONE	COALY, DARK BROWN, MODERATELY WEAK ROCK.
29.00	0.46			100% SILTSTONE	CARBONACEOUS, GREY, MODERATELY STRONG ROCK.
29.36	0.36			100% MUDSTONE	COALY, BLACK, VERY WEAK ROCK.
30.08	0.72			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
30.09	0.01			100% COAL, MID LUSTROUS - BRIGHT	
30.24	0.15			100% SILTSTONE	COALY, LAMINAE, GREY.
30.49	0.25			100% MUDSTONE	COALY, DARK GREY, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.22	0.73			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
31.25	0.03			100% MUDSTONE	COALY, DARK GREY, WEAK ROCK.
32.00	0.75			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
32.27	0.27			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
32.31	0.04			100% MUDSTONE	COALY, DARK GREY, FIRM.
32.32	0.01			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
33.03	0.71			100% MUDSTONE	CARBONACEOUS, FRIABLE, DARK GREY, VERY SOFT.
34.09	1.06			100% SILTSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
34.46	0.37			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, STRONG ROCK.
34.53	0.07			100% MUDSTONE	COALY, DARK GREY, MODERATELY STRONG ROCK.
34.62	0.09			100% COAL, MID LUSTROUS - DULL	
34.88	0.26			100% MUDSTONE	CARBONACEOUS, DARK GREY, FIRM.
35.27	0.39			100% MUDSTONE	CARBONACEOUS, GREY, FIRM.
35.31	0.04			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
35.50	0.19			100% CARBONACEOUS MUDSTONE	DARK GREY, VERY WEAK ROCK.
35.72	0.22			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, STRONG ROCK.
35.75	0.03			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
35.85	0.10			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, STRONG ROCK.
36.14	0.29			100% CARBONACEOUS MUDSTONE	GREY, MODERATELY STRONG ROCK.
36.56	0.42			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
36.66	0.10			100% SILTSTONE	GREY, STRONG ROCK.
37.90	1.24			60% CARBONACEOUS SHALE 40% MUDSTONE	DARK BROWN. LAMINAE, GREY-BROWN.
38.00	0.10			100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
38.02	0.02			100% SHALE	COALY, BLACK, STRONG ROCK.
38.12	0.10			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, MODERATELY WEAK ROCK.
38.20	0.08			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
38.30	0.10			100% SILTSTONE	MICACEOUS, GREY, STRONG ROCK.
38.38	0.08			100% MUDSTONE	COALY, BLACK, MODERATELY STRONG ROCK.
38.49	0.11			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, STRONG ROCK.
38.56	0.07			100% MUDSTONE	COALY, DARK BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.59	0.03			100% SILTSTONE	MICACEOUS, GREY-BROWN, MODERATELY STRONG ROCK.
39.37	0.78			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
39.49	0.12			100% MUDSTONE	COALY, BLACK, VERY WEAK ROCK.
39.73	0.24			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
41.13	1.40			100% SILTSTONE	CARBONACEOUS, MICACEOUS, GREY-BROWN, MODERATELY STRONG ROCK.
41.46	0.33			100% SHALE	FRIABLE, GREY, MODERATELY WEAK ROCK.
41.50	0.04			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
41.56	0.06			100% SHALE	FRIABLE, GREY, MODERATELY WEAK ROCK.
41.62	0.06			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
41.69	0.07			100% SHALE	FRIABLE, GREY-BROWN, WEAK ROCK.
41.72	0.03			100% MUDSTONE	BROWN, VERY SOFT, VERY STICKY.
41.75	0.03			100% SHALE	FRIABLE, GREY-BROWN, WEAK ROCK.
41.82	0.07			100% MUDSTONE	BROWN, VERY SOFT, VERY STICKY.
41.89	0.07			100% SHALE	FRIABLE, GREY-BROWN, WEAK ROCK.
41.98	0.09			100% MUDSTONE	BROWN, VERY SOFT, VERY STICKY.
42.10	0.12			100% SHALE	FRIABLE, GREY, WEAK ROCK.
42.18	0.08			100% SHALE	FRIABLE, WAXY, RED-BROWN, WEAK ROCK.
42.68	0.50			90% SHALE 10% SHALE	FRIABLE, GREY. LAMINAE, RED-BROWN.
42.71	0.03			100% MUDSTONE	GREY-BROWN, VERY SOFT, VERY STICKY.
43.00	0.29			90% SHALE 10% SHALE	FRIABLE, GREY. LAMINAE, RED-BROWN.
43.05	0.05			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
43.39	0.34			95% SHALE 5% SHALE	FRIABLE, GREY. LAMINAE, RED-BROWN.
43.52	0.13			100% MUDSTONE	GREY-BROWN, VERY SOFT, VERY STICKY.
43.56	0.04			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
43.59	0.03			100% MUDSTONE	RED-BROWN, VERY SOFT, VERY STICKY.
43.68	0.09			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
44.00	0.32			100% SHALE	FRIABLE, GREY-BROWN, WEAK ROCK.
44.32	0.32			100% SHALE	CARBONACEOUS, TRACES, GREY, WEAK ROCK.
44.42	0.10			100% SHALE	PINK-GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.42	1.00			50% SILTSTONE 50% SILTSTONE	FRIABLE, GREY. FRIABLE, RED-BROWN.
45.80	0.38			100% SHALE	FRIABLE, RED-BROWN, WEAK ROCK.
46.38	0.58			50% SHALE 50% SHALE	FRIABLE, GREY. FRIABLE, RED-BROWN.
46.42	0.04			100% MUDSTONE	RED-BROWN, VERY WEAK ROCK.
46.72	0.30			80% SHALE 20% SHALE	RED-BROWN. DARK GREY.
46.73	0.01			100% SILTSTONE	FRIABLE, GREY-GREEN, WEAK ROCK.
46.85	0.12			100% SILTSTONE	FRIABLE, RED-BROWN, WEAK ROCK.
46.98	0.13			100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
47.00	0.02			100% SILTSTONE	RED-BROWN, MODERATELY STRONG ROCK.
47.25	0.25			100% SILTSTONE	RED-BROWN, MODERATELY STRONG ROCK.
47.34	0.09			100% MUDSTONE	RED-BROWN, VERY SOFT, VERY STICKY.
47.37	0.03			100% SILTSTONE	FRIABLE, GREY-GREEN, WEAK ROCK.
48.72	1.35			60% SILTSTONE 40% SILTSTONE	GREY-GREEN. RED-BROWN.
49.24	0.52			100% SHALE	RED-BROWN, MODERATELY STRONG ROCK.
50.00	0.76			60% SILTSTONE 40% SILTSTONE	RED-BROWN. GREY-GREEN.
50.16	0.16			100% SANDSTONE,FINE GRAINED	GREY-GREEN.
50.17	0.01			100% SILTSTONE	GREEN, COMPLETELY WEATHERED, VERY SOFT.
50.20	0.03			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
50.48	0.28			100% SHALE	GREY, MODERATELY STRONG ROCK.
50.56	0.08			100% SHALE	RED-BROWN, STRONG ROCK.
50.89	0.33			70% SHALE 30% SILTSTONE	GREY. LAMINAE, LIGHT GREY.
52.59	1.70			100% MUDSTONE	MASSIVE, RED-BROWN, STRONG ROCK.
52.78	0.19			100% MUDSTONE	RED-BROWN, STRONG ROCK, WITH MUD PEL_ETS.
52.81	0.03			100% CLAY	RED-BROWN, VERY SOFT.
53.00	0.19			90% MUDSTONE 10% MUDSTONE	GREEN. LAMINAE, RED-BROWN. MODERATELY STRONG ROCK.
53.46	0.46			100% MUDSTONE	GREY-GREEN, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH ROOTLET BEDS.
53.94	0.48			100% SILTSTONE	GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.35	0.41			100% SILTSTONE	GREY, STRONG ROCK.
54.36	0.01			100% SILTSTONE	GREY-BROWN, WEAK ROCK.
54.51	0.15			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
54.61	0.10			100% SILTSTONE	DARK GREY, STRONG ROCK.
54.72	0.11			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
54.77	0.05			100% SILTSTONE	MICACEOUS, GREY-BROWN, MODERATELY STRONG ROCK.
55.50	0.73			50% CARBONACEOUS MUDSTONE 50% MUDSTONE	DARK BROWN. LAMINAE, GREY-GREEN. MODERATELY STRONG ROCK.
55.66	0.16			100% CARBONACEOUS SHALE	BLACK, STRONG ROCK.
55.78	0.12			100% MUDSTONE	GREY-BROWN, MODERATELY STRONG ROCK.
56.03	0.25			100% CARBONACEOUS SHALE	BLACK, STRONG ROCK.
56.08	0.05			100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
56.34	0.26			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY-BROWN. LAMINAE, DARK GREY. STRONG ROCK.
56.68	0.34			100% CARBONACEOUS MUDSTONE	DARK GREY, STRONG ROCK.
56.87	0.19			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
56.98	0.11			100% SILTSTONE	CARBONACEOUS, DARK GREY, STRONG ROCK.
57.32	0.34			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, TRACES, GREY-GREEN.
57.36	0.04			100% MUDSTONE	GREY-GREEN, VERY SOFT, VERY STICKY.
57.72	0.36			100% MUDSTONE	GREY-GREEN, STRONG ROCK.
58.52	0.80			80% MUDSTONE 20% MUDSTONE	RED-BROWN. LAMINAE, GREY-GREEN. MODERATELY STRONG ROCK.
58.55	0.03			100% MUDSTONE	COALY, BLACK, WEAK ROCK.
58.73	0.18			80% MUDSTONE 20% MUDSTONE	GREY-GREEN. LAMINAE, RED-BROWN. MODERATELY STRONG ROCK.
59.00	0.27			100% MUDSTONE	GREY, STRONG ROCK.
59.28	0.28			100% CARBONACEOUS SHALE	DARK GREY, STRONG ROCK.
59.47	0.19			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
59.63	0.16			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, MODERATELY STRONG ROCK.
59.78	0.15			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK.
60.24	0.46			100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
60.27	0.03			100% CARBONACEOUS MUDSTONE	FRIABLE, DARK BROWN, WEAK ROCK.
60.31	0.04			100% MUDSTONE	GREY-BROWN, VERY SOFT, VERY STICKY.
61.33	1.02			100% MUDSTONE	GREEN-BROWN, MODERATELY WEAK ROCK.
61.96	0.63			60% CARBONACEOUS SHALE 40% SHALE	DARK BROWN. GREY-GREEN. MODERATELY STRONG ROCK.
64.01	2.05			50% CARBONACEOUS SHALE 50% MUDSTONE	DARK BROWN. GREY. MODERATELY WEAK ROCK.
64.38	0.37			100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
64.44	0.06			100% MUDSTONE	FRIABLE, BROWN, WEAK ROCK.
64.84	0.40			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
64.91	0.07			100% MUDSTONE	GREY-BROWN, VERY SOFT, VERY STICKY.
64.95	0.04			100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
64.97	0.02			100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
65.15	0.18			100% SILTSTONE	CARBONACEOUS, TRACES, GREY.
65.25	0.10			100% SILTSTONE	GREY, STRONG ROCK.
65.27	0.02			100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK.
65.28	0.01			100% MUDSTONE	FRIABLE, GREY-BROWN, VERY WEAK ROCK.
65.64	0.36			70% SILTSTONE 30% SHALE	GREY. CARBONACEOUS, TRACES, DARK GREY. MODERATELY STRONG ROCK.
65.67	0.03			100% MUDSTONE	GREY-BROWN, VERY SOFT, VERY STICKY.
65.71	0.04			100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
67.25	1.54			50% SILTSTONE 50% MUDSTONE	MICACEOUS, GREY. LAMINAE, GREY-BROWN. MODERATELY WEAK ROCK.
67.42	0.17			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY WEAK ROCK.
67.44	0.02			100% MUDSTONE	FRIABLE, GREY-BROWN, VERY WEAK ROCK.
68.00	0.56			50% CARBONACEOUS SHALE 50% MUDSTONE	DARK BROWN. CARBONACEOUS, LAMINAE, GREY-BROWN. WEAK ROCK.
68.04	0.04			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
68.08	0.04			100% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN, MODERATELY WEAK ROCK.
68.10	0.02			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
68.11	0.01			100% COAL, MID LUSTROUS - BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.13	0.02			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
68.21	0.08			100% SHALE	DARK GREY, MODERATELY STRONG ROCK.
68.48	0.27			70% CARBONACEOUS SHALE 30% MUDSTONE	DARK BROWN. LAMINAE, BROWN. MODERATELY STRONG ROCK.
70.99	2.51			80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN. GREY-BROWN. MODERATELY WEAK ROCK.
71.01	0.02			100% MUDSTONE	BROWN, VERY WEAK ROCK.
71.03	0.02			100% MUDSTONE	SILTSTONE, FRIABLE, BROWN, VERY WEAK ROCK.
72.63	1.60			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY STRONG ROCK.
72.70	0.07			100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
72.71	0.01			100% COAL, MID LUSTROUS - BRIGHT	
73.34	0.63			60% MUDSTONE 40% CARBONACEOUS SHALE	GREY-BROWN. LAMINAE, DARK BROWN.
73.81	0.47			100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
77.00	3.19			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN.
77.25	0.25			100% CARBONACEOUS MUDSTONE	GREY, MODERATELY STRONG ROCK.
77.29	0.04			100% MUDSTONE	FRIABLE, BROWN, WEAK ROCK.
77.82	0.53			100% CARBONACEOUS MUDSTONE	GREY, MODERATELY WEAK ROCK.
77.86	0.04			100% MUDSTONE	FRIABLE, BROWN, VERY WEAK ROCK.
78.08	0.22			100% CARBONACEOUS MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
78.22	0.14			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY STRONG ROCK.
78.51	0.29			100% MUDSTONE	FRIABLE, BROWN, WEAK ROCK.
78.78	0.27			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY STRONG ROCK.
78.80	0.02			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
78.95	0.15			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY STRONG ROCK.
80.67	1.72			80% SANDSTONE,FINE GRAINED 20% SANDSTONE	GREY. MED.-COARSE GRAINED, LENSES, GREY. STRONG ROCK.
82.01	1.34			100% SANDSTONE,COARSE GRAINED	GREY-GREEN, VERY STRONG ROCK.
84.16	2.15			100% SANDSTONE,COARSE GRAINED	COALY, LENSES, GREY-GREEN, STRONG ROCK.
84.55	0.39			100% PEBBLE CONGLOMERATE	HETEROGENEOUS, GREY, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
84.56	0.01			100% MUDSTONE	COALY, BLACK, VERY WEAK ROCK.
84.59	0.03			100% PEBBLE CONGLOMERATE	HETEROGENEOUS, GREY, VERY STRONG ROCK.
85.39	0.80			100% SANDSTONE,COARSE GRAINED	PEBBLY, GREY-GREEN, VERY STRONG ROCK.
85.88	0.49			100% SANDSTONE	LAMINAE, MED.-COARSE GRAINED, GREY-GREEN, VERY STRONG ROCK.
86.12	0.24			100% SANDSTONE,COARSE GRAINED	PEBBLY, GREY-GREEN, VERY STRONG ROCK.
86.41	0.29			100% PEBBLE CONGLOMERATE	HETEROGENEOUS, GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
86.90	0.49			100% MUDSTONE	GREY-GREEN, WEAK ROCK.
87.16	0.26			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
88.64	1.48			100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, GREY, STRONG ROCK.
88.66	0.02			100% SANDSTONE,MEDIUM GRAINED	GREY, HIGHLY WEATHERED, WEAK ROCK.
89.00	0.34			100% SANDSTONE,MEDIUM GRAINED	GREY, VERY STRONG ROCK.
89.81	0.81			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, VERY STRONG ROCK.
90.20	0.39			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK.
90.38	0.18			100% MUDSTONE	FRIABLE, GREY-GREEN, WEAK ROCK.
90.41	0.03			100% MUDSTONE	GREY-GREEN, VERY SOFT, VERY STICKY.
91.20	0.79			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK.
92.60	1.40			50% SILTSTONE 50% CARBONACEOUS MUDSTONE	GREY-BROWN. LAMINAE, DARK GREY. MODERATELY WEAK ROCK.
92.68	0.08			100% CARBONACEOUS MUDSTONE	GREY-BROWN, MODERATELY STRONG ROCK.
92.77	0.09			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY STRONG ROCK.
94.18	1.41			100% SANDSTONE,FINE GRAINED	GREY, VERY STRONG ROCK.
94.89	0.71			100% SANDSTONE	VERY FINE GRAINED, GREY, VERY STRONG ROCK.
96.73	1.84			100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, STRONG ROCK.
96.83	0.10			100% CARBONACEOUS MUDSTONE	MID LUSTROUS-BRIGHT COAL, LENSES, DARK BROWN, MODERATELY STRONG ROCK.
97.15	0.32			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, MODERATELY WEAK ROCK.
97.29	0.14			100% SILTSTONE	GREY-BROWN, MODERATELY STRONG ROCK.
98.00	0.71			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, STRONG ROCK.
98.84	0.84			100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.00	2.16			100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, VERY STRONG ROCK.
101.77	0.77			100% SANDSTONE	MED.-COARSE GRAINED, GREY, VERY STRONG ROCK.
102.44	0.67			100% SANDSTONE,MEDIUM GRAINED	MID LUSTROUS-BRIGHT COAL, LENSES, GREY, VERY STRONG ROCK.
104.65	2.21			100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, VERY STRONG ROCK.
104.66	0.01			100% COAL, MID LUSTROUS - BRIGHT	
105.20	0.54			100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, GREY, STRONG ROCK.
105.89	0.69			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY.
105.95	0.06			100% MUDSTONE	FRIABLE, GREY, VERY WEAK ROCK.
106.86	0.91			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, MODERATELY STRONG ROCK.
106.97	0.11			100% MUDSTONE	MICACEOUS, GREY-GREEN, VERY WEAK ROCK.
107.00	0.03			100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
108.84	1.84			100% MUDSTONE	WAXY, GREY-GREEN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
110.00	1.16			100% CARBONACEOUS MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
113.06	3.06			70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, TRACES, GREY-BROWN. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
114.45	1.39			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
114.80	0.35			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY. LAMINAE, CARBONACEOUS, GREY. WITH MUD PELLETS, WITH PARTING LINEATION, MODERATELY SPACED JOINTS.
114.85	0.05			100% SANDSTONE,MEDIUM GRAINED	MID LUSTROUS-BRIGHT COAL, LAMINAE, LIGHT GREY, STRONG ROCK, WITH MUD PELLETS, WITH PARTING LINEATION, MODERATELY SPACED JOINTS.
115.05	0.20			50% SANDSTONE 50% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. LAMINAE, CARBONACEOUS, GREY. WITH MUD PELLETS, WITH PARTING LINEATION, MODERATELY SPACED JOINTS.
115.75	0.70			100% SANDSTONE,COARSE GRAINED	LIGHT GREY, VERY STRONG ROCK, MODERATELY SPACED JOINTS.
116.35	0.60			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. VERY STRONG ROCK, MODERATELY SPACED JOINTS.
116.37	0.02			100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.77	0.40			95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LENSES, BLACK. VERY STRONG ROCK, MODERATELY SPACED JOINTS.
117.18	0.41			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
120.24	3.06			95% SANDSTONE,COARSE GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. WEAK ROCK, MODERATELY SPACED JOINTS.
120.69	0.45			100% MUDSTONE	WAXY, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
121.81	1.12			60% SANDSTONE 40% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
128.10	6.29			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, MODERATELY SPACED JOINTS.
129.09	0.99			70% SANDSTONE 30% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, GREY. LAMINAE, DARK GREY. STRONG ROCK, MODERATELY SPACED JOINTS.
133.90	4.81			95% SANDSTONE,COARSE GRAINED 5% COAL	GREY. LENSES, BLACK. STRONG ROCK, MODERATELY SPACED JOINTS.
134.18	0.28			90% SANDSTONE,COARSE GRAINED 10% COAL	GREY. LENSES, BLACK. STRONG ROCK, MODERATELY SPACED JOINTS.
134.37	0.19			100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
134.53	0.16			50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY-BROWN. LAMINAE, GREY. MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
135.47	0.94			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. STRONG ROCK, MODERATELY SPACED JOINTS.
136.15	0.68			95% MUDSTONE 5% CARBONACEOUS MUDSTONE	SILTSTONE, GREY. LAMINAE, DARK GREY. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
137.00	0.85			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
138.87	1.87			95% SANDSTONE,COARSE GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
139.15	0.28			80% SANDSTONE,COARSE GRAINED 20% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH PARTING LINEATION, MODERATELY SPACED JOINTS.
139.23	0.08			100% CARBONACEOUS MUDSTONE	FRIABLE, BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
139.48	0.25			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
140.04	0.56			100% CARBONACEOUS MUDSTONE	WAXY, DARK BROWN, WEAK ROCK, MODERATELY SPACED JOINTS.
140.23	0.19			100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
141.34	1.11			85% SILTSTONE 15% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
141.37	0.03			100% MUDSTONE	FRIABLE, GREY-BROWN, WEAK ROCK, MODERATELY SPACED JOINTS.
141.44	0.07			60% SILTSTONE 40% CARBONACEOUS MUDSTONE	GREY-BROWN. LAMINAE, DARK GREY. MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
142.03	0.59			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
142.14	0.11			60% SILTSTONE 40% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. MODERATELY SPACED JOINTS.
142.69	0.55			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS.
143.07	0.38			50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	GREY-BROWN. LAMINAE, BROWN. MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS.
144.39	1.32			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. STRONG ROCK.
144.80	0.41			95% SANDSTONE,COARSE GRAINED 5% COAL, MID LUSTROUS	GREY. LAMINAE. STRONG ROCK.
144.85	0.05			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY WEAK ROCK.
144.87	0.02			100% MUDSTONE	MICACEOUS, GREY-BROWN, WEAK ROCK.
144.95	0.08			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
144.97	0.02			100% COAL, MID LUSTROUS	
145.03	0.06			100% MUDSTONE	FRIABLE, LIGHT BROWN, VERY WEAK ROCK.
145.08	0.05			100% COAL, MID LUSTROUS - DULL	
145.16	0.08			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
145.20	0.04			100% COAL, MID LUSTROUS - DULL	
145.25	0.05			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
145.27	0.02			100% COAL, MID LUSTROUS - BRIGHT	

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
145.32	0.05			100% CARBONACEOUS SHALE	COALY, LAMINAE, DARK BROWN, MODERATELY STRONG ROCK.
146.03	0.71			100% SILTSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
146.24	0.21			100% MUDSTONE	MICACEOUS, LIGHT BROWN, SOFT, VERY STICKY.
146.91	0.67			60% CARBONACEOUS MUDSTONE 40% MUDSTONE	LAMINAE, DARK BROWN. MICACEOUS, BROWN. WEAK ROCK.
147.36	0.45			100% MUDSTONE	CARBONACEOUS, TRACES, LIGHT BROWN, WEAK ROCK.
147.41	0.05			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
147.44	0.03			95% MUDSTONE 5% CARBONACEOUS MUDSTONE	MICACEOUS, LIGHT BROWN. LAMINAE, DARK BROWN. MODERATELY WEAK ROCK.
147.50	0.06			100% SHALE	COALY, BLACK, MODERATELY STRONG ROCK.
148.38	0.88			100% SILTSTONE	MASSIVE, GREY, MODERATELY STRONG ROCK.
148.63	0.25			100% MUDSTONE	FRIABLE, LIGHT BROWN, VERY WEAK ROCK.
148.81	0.18			100% SHALE	COALY, BLACK, MODERATELY STRONG ROCK.
148.85	0.04			100% MUDSTONE	SILTSTONE, LIGHT GREY, MODERATELY WEAK ROCK.
148.89	0.04			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
149.00	0.11			100% CARBONACEOUS MUDSTONE	MICACEOUS, DARK GREY, MODERATELY WEAK ROCK.
149.04	0.04			100% CARBONACEOUS MUDSTONE	MICACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
149.06	0.02			80% CARBONACEOUS SHALE 20% MUDSTONE	DARK BROWN. LAMINAE, MICACEOUS, LIGHT BROWN.
149.15	0.09			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	MICACEOUS, LIGHT BROWN. LAMINAE, DARK BROWN.
149.18	0.03			70% CARBONACEOUS SHALE 30% MUDSTONE	DARK BROWN. LAMINAE, LIGHT BROWN.
149.31	0.13			100% MUDSTONE	FRIABLE, LIGHT BROWN, WEAK ROCK.
149.32	0.01			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
149.35	0.03			100% COAL, MID LUSTROUS	
149.53	0.18			90% CARBONACEOUS SHALE 10% COAL, MID LUSTROUS - BRIGHT	DARK BROWN. BANDS. MODERATELY STRONG ROCK.
150.04	0.51			90% SILTSTONE 10% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
150.41	0.37			70% CARBONACEOUS SHALE 30% MUDSTONE	DARK BROWN. CARBONACEOUS, TRACES, BROWN. MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
150.70	0.29			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, MODERATELY WEAK ROCK.
150.75	0.05			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
151.43	0.68			100% MUDSTONE	GREY-BROWN.
151.82	0.39			100% MUDSTONE	FRIABLE, MICACEOUS, GREY-GREEN, VERY WEAK ROCK.
151.92	0.10			100% MUDSTONE	FRIABLE, MICACEOUS, GREY-GREEN.
151.95	0.03			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, MODERATELY WEAK ROCK.
152.22	0.27			80% CARBONACEOUS SHALE 20% MUDSTONE	DARK GREY. LAMINAE, BROWN. MODERATELY STRONG ROCK.
153.00	0.78			100% SILTSTONE	MICACEOUS, GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
154.40	1.40			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK.
155.17	0.77			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK.
155.86	0.69			70% MUDSTONE 30% SANDSTONE	SILTSTONE, GREY. VERY FINE GRAINED, LENSES, LIGHT GREY.
156.00	0.14			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
156.17	0.17			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK.
156.56	0.39			60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE	GREY. VERY FINE GRAINED, LAMINAE, LIGHT GREY. STRONG ROCK.
163.17	6.61			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
163.35	0.18			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
163.91	0.56			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. LAMINAE. STRONG ROCK.
		TOP OF DALMAYNE B : 266.09 M R.L.			
164.05	0.14			100% COAL, DULL	
164.33	0.28			95% MUDSTONE 5% CARBONACEOUS MUDSTONE	FRIABLE, LIGHT BROWN. LAMINAE, DARK BROWN. VERY WEAK ROCK.
164.64	0.31			100% COAL, DULL	STRONG ROCK.
164.68	0.04			100% MUDSTONE	MICACEOUS, CARBONACEOUS, GREY-BROWN, WEAK ROCK.
164.82	0.14			90% CARBONACEOUS SHALE 10% COAL, MID LUSTROUS - BRIGHT	DARK BROWN. LAMINAE. STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
165.21	0.39			50% MUDSTONE 50% CARBONACEOUS MUDSTONE	FRIABLE, LIGHT BROWN. FRIABLE, DARK BROWN. VERY WEAK ROCK.
165.89	0.68			90% CARBONACEOUS SHALE 10% MUDSTONE	DARK BROWN. LAMINAE, BROWN. STRONG ROCK.
166.40	0.51			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
166.54	0.14			100% MUDSTONE	GREY, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
166.60	0.06			100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
166.73	0.13			100% MUDSTONE	GREEN-BROWN, STIFF, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG., VERY STICKY.
166.77	0.04			100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
166.81	0.04			100% CARBONACEOUS SHALE	DARK GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
166.82	0.01			100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
				BASE OF DALMAYNE B : THICKNESS= 2.91 M; SAMPLED THICKNESS= 0.00 M	
168.91	2.09			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., INFILLED WITH CALCITE.
169.30	0.39			60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. MODERATELY STRONG ROCK.
169.68	0.38			80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	LIGHT GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
170.24	0.56			100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
171.42	1.18			60% SHALE 40% SHALE	CARBONACEOUS, DARK GREY. LAMINAE, GREY. MODERATELY STRONG ROCK.
171.53	0.11			50% SHALE 50% MUDSTONE	COALY, LAMINAE, DARK BROWN. MICACEOUS, LIGHT BROWN.
172.00	0.47			100% SHALE	CARBONACEOUS, TRACES, DARK GREY.
172.03	0.03			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY WEAK ROCK.
172.40	0.37			100% SHALE	CARBONACEOUS, TRACES, GREY.
172.73	0.33			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
172.94	0.21			80% CARBONACEOUS SHALE 20% SILTSTONE	DARK GREY. LAMINAE, LIGHT GREY. MODERATELY STRONG ROCK.
173.00	0.06			70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, DARK BROWN. THINLY BEDDED.
173.34	0.34			100% MUDSTONE	SILTSTONE, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
173.47	0.13			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
173.48	0.01			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
173.49	0.01			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
173.50	0.01			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
173.62	0.12			70% CARBONACEOUS SHALE 30% SILTSTONE	DARK BROWN. LENSES, GREY. MODERATELY STRONG ROCK.
173.63	0.01			100% COAL, BRIGHT WITH FEW DULL BANDS	
174.28	0.65			60% CARBONACEOUS MUDSTONE 40% SANDSTONE	GREY-BROWN. VERY FINE GRAINED, LAMINAE, GREY. MODERATELY STRONG ROCK.
174.54	0.26			70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
185.42	10.88			100% SANDSTONE	MED.-COARSE GRAINED, GREY, WITH CARBONACEOUS WISPS.
185.92	0.50			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK GREY.
186.11	0.19			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
186.21	0.10			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. LAMINAE, DARK GREY.
186.37	0.16			90% MUDSTONE 10% SANDSTONE,FINE GRAINED	DARK GREY. LAMINAE, GREY.
187.40	1.03			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
187.46	0.06			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
187.81	0.35			100% SANDSTONE,FINE GRAINED	SILTSTONE, LENSES, GREY, STRONG ROCK.
188.13	0.32			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
188.23	0.10			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS. STRONG ROCK.
188.31	0.08			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.41	0.10			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, BLACK. STRONG ROCK.
188.57	0.16			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
188.62	0.05			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, BLACK. STRONG ROCK.
190.24	1.62			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
190.40	0.16			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
190.75	0.35			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
191.09	0.34			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
191.16	0.07			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
191.54	0.38			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
191.74	0.20			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
191.86	0.12			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
191.94	0.08			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
192.27	0.33			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
192.95	0.68			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
193.02	0.07			100% CARBONACEOUS SHALE	COALY, LAMINAE, DARK BROWN, MODERATELY WEAK ROCK.
193.07	0.05			60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS SHALE	GREY. LAMINAE, DARK GREY.
193.55	0.48			100% SANDSTONE,FINE GRAINED	SILTSTONE, PARTINGS, GREY, STRONG ROCK.
194.00	0.45			100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, GREY, STRONG ROCK.
194.80	0.80			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS, PARTINGS. STRONG ROCK.
195.73	0.93			75% SILTSTONE 25% SANDSTONE	DARK GREY. VERY FINE GRAINED, DARK GREY. STRONG ROCK.
197.15	1.42			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				TOP OF DALMAYNE C : 252.85 M R.L.	
197.75	0.60			100% CARBONACEOUS SHALE	DARK GREY, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS.
197.83	0.08			100% SHALE	LIGHT GREY, VERY WEAK ROCK.
198.72	0.89			100% MUDSTONE	CARBONACEOUS, DARK GREY, VERY WIDELY SPACED JOINTS.
				BASE OF DALMAYNE C : THICKNESS= 1.57 M; SAMPLED THICKNESS= 0.00 M	
199.62	0.90			100% SILTSTONE	GREY, STRONG ROCK.
201.15	1.53			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
201.25	0.10			100% SILTSTONE	GREY, STRONG ROCK.
202.42	1.17			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
202.69	0.27			100% SILTSTONE	GREY, STRONG ROCK.
206.39	3.70			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
206.99	0.60			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
208.91	1.92			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
208.98	0.07			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
209.29	0.31			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
209.54	0.25			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, WITH MUD PELLETS.
210.23	0.69			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
210.61	0.38			100% SILTSTONE	GREY, STRONG ROCK.
211.15	0.54			95% SANDSTONE,COARSE GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
212.46	1.31			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
212.51	0.05			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
212.86	0.35			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
213.16	0.30			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
213.45	0.29			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
213.57	0.12			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
213.70	0.13			95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
213.83	0.13			95% SANDSTONE,COARSE GRAINED 5% COAL	GREY. FRAGMENTS. STRONG ROCK.
215.63	1.80			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
215.90	0.27			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
217.30	1.40			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
218.18	0.88			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
218.30	0.12			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
218.32	0.02			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
219.20	0.88			100% SHALE	CARBONACEOUS, DARK BROWN, VERY WIDELY SPACED JOINTS.
220.54	1.34			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
220.72	0.18			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK, WITH MUD PELLETS.
222.03	1.31			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
222.36	0.33			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
222.64	0.28			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
222.69	0.05			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK, WITH MUD PELLETS.
224.83	2.14			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
225.30	0.47			95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. WITH MUD PELLETS.
226.47	1.17			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
226.81	0.34			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. LAMINAE. STRONG ROCK.
227.13	0.32			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
227.53	0.40			60% SANDSTONE,COARSE GRAINED 40% MUDSTONE	GREY. CARBONACEOUS, PELLETAL. STRONG ROCK, VERY WIDELY SPACED JOINTS.
230.29	2.76			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
230.88	0.59			90% SANDSTONE,COARSE GRAINED 10% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. STRONG ROCK, WITH MUD PELLETS.
230.89	0.01			100% COAL, BRIGHT	
232.21	1.32			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
232.40	0.19			95% SILTSTONE 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. MODERATELY STRONG ROCK.
232.50	0.10			60% SANDSTONE,COARSE GRAINED 40% MUDSTONE	GREY. PELLETAL, GREY-BROWN. STRONG ROCK.
235.31	2.81			90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, GREY. LENSES, BLACK. STRONG ROCK.
238.32	3.01			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
241.00	2.68			95% SANDSTONE,COARSE GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. STRONG ROCK, WITH MUD PELLETS.
241.11	0.11			80% SANDSTONE 20% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, GREY. LAMINAE, DARK BROWN. STRONG ROCK, WITH MUD PELLETS.
241.72	0.61			95% SANDSTONE,COARSE GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN. STRONG ROCK.
241.86	0.14			95% TUFF 5% COAL	BAKED, WHITE. TRACES. EXTREMELY SRONG ROCK, WITH CARBONACEOUS WISPS.
244.40	2.54			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
245.84	1.44			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
246.24	0.40			50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY. PELLETAL, GREY-BROWN. STRONG ROCK.
250.46	4.22			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
251.69	1.23			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
251.86	0.17			90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, GREY. LAMINAE. STRONG ROCK.
253.77	1.91			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
254.14	0.37			100% SANDSTONE,MEDIUM GRAINED	GREY, VERY WEAK ROCK.
259.40	5.26			95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. LAMINAE.
261.89	2.49			95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. TRACES, DARK BROWN. STRONG ROCK.
263.21	1.32			100% SANDSTONE,MEDIUM GRAINED	GREY, HIGHLY WEATHERED, WEAK ROCK.
263.49	0.28			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
264.37	0.88			100% SANDSTONE,MEDIUM GRAINED	GREY, HIGHLY WEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
265.14	0.77			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG.
265.40	0.26			50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, GREY-BROWN.
265.51	0.11			100% SANDSTONE,FINE GRAINED	DARK GREY, COMPLETELY WEATHERED, VERY SOFT, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG.
265.68	0.17			90% SANDSTONE,FINE GRAINED 10% SANDSTONE,FINE GRAINED	GREY. NON-CLEATED. MODERATELY WEATHERED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG.
268.57	2.89			95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. TRACES, DARK BROWN. MODERATELY STRONG ROCK.
270.03	1.46			100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG.
270.25	0.22			80% SANDSTONE 20% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, GREY. STREAKS, DARK BROWN. MODERATELY STRONG ROCK.
270.42	0.17			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK.
270.61	0.19			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. LENSES, DARK BROWN. MODERATELY WEAK ROCK.
271.42	0.81			100% SANDSTONE	MED.-COARSE GRAINED, GREY, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG.
272.02	0.60			90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, GREY. PELLETAL, BLACK. VERY THINLY BEDDED.
273.16	1.14			90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	FRIABLE, GREY. LENSES, GREY. WEAK ROCK, CLOSELY SPACED JOINTS.
274.40	1.24			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
275.65	1.25			95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. LENSES.
277.34	1.69			80% MUDSTONE 20% MUDSTONE	GREY. LAMINAE, CARBONACEOUS, DARK GREY. MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., DISCONTINUITIES INFILLED WITH SOIL (<1.
277.68	0.34			60% SANDSTONE,COARSE GRAINED 40% COAL, DULL WITH NUMEROUS BRIGHT BANDS	GREY. LENSES. STRONG ROCK.
280.57	2.89			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG.
281.13	0.56			100% SANDSTONE,COARSE GRAINED	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
281.23	0.10			95% CALCITE 5% COAL	WHITE. FRAGMENTS. MODERATELY WEAK ROCK.
282.47	1.24			100% SANDSTONE	MED.-COARSE GRAINED, GREY, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., INFILLED WITH CALCITE.
282.52	0.05			90% CALCITE 10% COAL	WHITE. FRAGMENTS. MODERATELY WEAK ROCK.
282.62	0.10			100% SANDSTONE,COARSE GRAINED	GREY, MODERATELY STRONG ROCK.
283.19	0.57			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
283.30	0.11			100% SANDSTONE,COARSE GRAINED	GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
283.40	0.10			100% SANDSTONE,COARSE GRAINED	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
284.00	0.60			100% SANDSTONE,COARSE GRAINED	GREY, STRONG ROCK.
284.21	0.21		21/1	100% CARBONACEOUS MUDSTONE	COALY, DARK BROWN.
284.31	0.10		21/1	50% MUDSTONE 50% SILTSTONE	GREY. GREY-BROWN.
284.52	0.21		21/1	100% CARBONACEOUS MUDSTONE	DARK BROWN.
284.62	0.10		21/1	100% CARBONACEOUS MUDSTONE	DARK GREY.
284.72	0.10		21/1	100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
				TOP OF DALMAYNE D LOWER : 145.28 M R.L.	
284.84	0.12		21/2	100% COAL, DULL	
284.88	0.04		21/2	100% CARBONACEOUS MUDSTONE	DARK GREY.
284.90	0.02		21/2	100% MUDSTONE	GREY, VERY WEAK ROCK.
284.92	0.02		21/2	100% MUDSTONE	CARBONACEOUS, DARK GREY.
284.94	0.02		21/2	100% CARBONACEOUS SHALE	DARK GREY.
284.98	0.04		21/2	100% COAL, DULL	WITH CALCITE ON CLEAT.
285.08	0.10		21/2	100% COAL, HEAVY DULL	VERY WEAK ROCK.
285.22	0.14		21/2	100% MUDSTONE	CARBONACEOUS, BANDS, GREY.
285.43	0.21		21/2	100% COAL, DULL	VERY WEAK ROCK, WITH MUD CASTS/CRACKS.
285.45	0.02		21/2	100% MUDSTONE	GREY-BROWN.
285.48	0.03		21/2	100% COAL, DULL	CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., INFILLED WITH CALCITE.
285.50	0.02		21/2	90% MUDSTONE 10% COAL	GREY-BROWN. LAMINAE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
285.79	0.29		21/2	100% COAL, DULL	
285.85	0.06		21/2	100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
285.90	0.05		21/2	100% COAL, DULL	
		BASE OF DALMAYNE D LOWER : THICKNESS= 1.18 M; SAMPLED THICKNESS= 1.18 M			
285.93	0.03			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, WITH CALCITE ON CLEAT, VERY WEAK ROCK.
286.02	0.09			100% SHALE	CARBONACEOUS, GREY-BROWN.
286.14	0.12			80% MUDSTONE 20% COAL	GREY. STREAKS. VERY WEAK ROCK.
286.40	0.26			100% MUDSTONE	GREY, VERY WEAK ROCK.
286.70	0.30			100% MUDSTONE	GREY, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., INFILLED WITH CALCITE.
286.76	0.06			80% MUDSTONE 20% COAL	GREY. MID LUSTROUS-BRIGHT COAL, LAMINAE.
288.49	1.73			100% MUDSTONE	GREY.
288.52	0.03			80% CARBONACEOUS MUDSTONE 20% COAL	DARK BROWN. MID LUSTROUS-BRIGHT COAL, LAMINAE.
288.55	0.03			100% MUDSTONE	GREY.
288.57	0.02			100% MUDSTONE	MICACEOUS, FRIABLE, LIGHT BROWN, VERY WEAK ROCK.
		TOP OF DALMAYNE D LOWER : 141.43 M R.L.			
288.63	0.06		21/3	100% COAL, DULL WITH FEW BRIGHT BANDS	
288.71	0.08		21/3	100% COAL, DULL	
288.74	0.03		21/3	100% COAL, DULL WITH FEW BRIGHT BANDS	
288.81	0.07		21/3	100% COAL, HEAVY DULL	
289.09	0.28		21/3	100% COAL, DULL WITH FEW BRIGHT BANDS	
289.12	0.03		21/3	100% MUDSTONE	WAXY, BROWN, VERY STICKY.
289.27	0.15		21/3	100% COAL, DULL	
289.29	0.02		21/3	100% MUDSTONE	GREY-BROWN, VERY WEAK ROCK.
289.34	0.05		21/3	100% COAL, DULL	CALCITIC, LENSES.
		BASE OF DALMAYNE D LOWER : THICKNESS= 0.77 M; SAMPLED THICKNESS= 0.77 M			

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
289.				90% MUDSTONE 10% COAL	GREY. FRAGMENTS, BLACK. WEAK ROCK.
28[illegible]	[illegible]			95% MUDSTONE 5% COAL	GREY. FRAGMENTS. WEAK ROCK.
289.77	0.04			80% MUDSTONE 20% COAL	GREY. MID LUSTROUS-BRIGHT COAL, BADLY BROKEN. WEAK ROCK.
290.45	0.68			90% MUDSTONE 10% COAL	GREY. FRAGMENTS. WEAK ROCK.
290.48	0.03			100% CARBONACEOUS MUDSTONE	BADLY BROKEN, DARK BROWN, VERY WEAK ROCK.
290.53	0.05			100% COAL, DULL WITH FEW BRIGHT BANDS	
290.59	0.06			100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
290.68	0.09			70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. DARK GREY.
291.67	0.99			95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, DARK BROWN. MODERATELY WEAK ROCK.
291.71	0.04			100% CARBONACEOUS MUDSTONE	DARK BROWN, FIRM, VERY STICKY.
291.76	0.05			100% MUDSTONE	FRIABLE, GREY, VERY WEAK ROCK.
291.79	0.03			100% CARBONACEOUS MUDSTONE	DARK BROWN, FIRM, VERY STICKY.
292.34	0.55			95% MUDSTONE 5% COAL	GREY. FRAGMENTS. WEAK ROCK.
293.10	0.76			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
294.00	0.90			100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, STRONG ROCK.
296.74	2.74			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
297.21	0.47			90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, GREY. LENSES, MID LUSTROUS-BRIGHT COAL. STRONG ROCK.
304.40	7.19			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
307.22	2.82			100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, STRONG ROCK.
308.40	1.18			100% SANDSTONE	MED.-COARSE GRAINED, BADLY BROKEN, GREY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	163.91 - 166.82 M	2.91 M
DC	0.00 M	197.15 - 198.72 M	1.57 M
DDL	1.18 M	284.72 - 285.90 M	1.18 M
DDL	0.77 M	288.57 - 289.34 M	0.77 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
21/1	284.00 - 284.72 M	0.72 M
21/2	284.72 - 285.90 M	1.18 M
21/3	286.57 - 289.34 M	0.77 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 22

HOLE TYPE	CORE
EASTING	601,100 M AM GRID
NORTHING	5,375,900 M AM GRID
ELEVATION	270.00 M
TOTAL DEPTH DRILLED	319.80 M
DRILLING STARTED	24/ 1/80
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 22

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.45	0.45			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
3.00	2.55			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
3.15	0.15			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
4.00	0.85			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
4.58	0.58			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
6.00	1.42			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
6.31	0.31			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
6.44	0.13			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
6.85	0.41			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
7.50	0.65			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
8.74	1.24			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
9.30	0.56			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
9.80	0.50			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
10.67	0.87			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
10.80	0.13			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
13.49	2.69			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
13.80	0.31			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
15.67	1.87			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
16.80	1.13			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
17.70	0.90			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
18.40	0.70			100% DOLERITE	SCREE, FERRUGINOUS, GREY-BROWN, HIGHLY WEATHERED.
19.80	1.40			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
22.64	2.84			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.
22.80	0.16			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
25.01	2.21			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, MODERATELY WEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
25.80	0.79			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
27.33	1.53			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
27.40	0.07			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
29.68	2.28			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
29.80	0.12			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
29.94	0.14			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED.
30.50	0.56			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, STRONG ROCK.
30.83	0.33			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED.
31.80	0.97			100% DOLERITE	SCREE, ORANGE-BROWN, COMPLETELY WEATHERED.
34.40	2.60			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
34.78	0.38			100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY, UNWEATHERED.
37.75	2.97			100% DOLERITE	SCREE, GREY, UNWEATHERED, VERY STRONG ROCK.
38.97	1.22			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
39.84	0.87			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
43.08	3.24			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
43.80	0.72			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED.
45.19	1.39			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
46.80	1.61			100% DOLERITE	SCREE, GREY, MODERATELY WEATHERED, STRONG ROCK.
47.80	1.00			100% DOLERITE	SCREE, GREY, MODERATELY WEATHERED, STRONG ROCK.
48.72	0.92			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
49.04	0.32			100% DOLERITE	SCREE, BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
49.65	0.61			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
50.96	1.31			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
52.41	1.45			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
53.35	0.94			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
55.19	1.84			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
55.80	0.61			100% DOLERITE	SCREE, GREY, MODERATELY WEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
58.39	2.59			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
58.80	0.41			100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK.
61.80	3.00			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
63.51	1.71			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY STRONG ROCK.
64.80	1.29			100% DOLERITE	SCREE, COMPLETELY WEATHERED.
67.65	2.85			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
67.80	0.15			100% DOLERITE	SCREE, COMPLETELY WEATHERED.
70.65	2.85			100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
70.80	0.15			100% DOLERITE	SCREE, COMPLETELY WEATHERED.
76.80	6.00			100% DOLERITE	SCREE, GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
79.30	2.50			100% DOLERITE	SCREE, GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
79.60	0.30			100% DOLERITE	SCREE, COMPLETELY WEATHERED.
79.80	0.20			100% MUDSTONE	FRIABLE, BADLY BROKEN, GREY, VERY WEAK ROCK.
81.14	1.34			100% MUDSTONE	FRIABLE, GREY, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
82.87	1.73			70% SILTSTONE 30% SANDSTONE	GREY. VERY FINE GRAINED, LENSES, LIGHT GREY. MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
83.12	0.25			100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
84.16	1.04			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
85.80	1.64			60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
86.99	1.19			80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, TRACES, GREY. LAMINAE, BROWN. STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 5 DEG.
88.80	1.81			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 5 DEG.
91.63	2.83			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				TOP OF DALMAYNE B : 178.37 M R.L.	
91.68	0.05			100% COAL, DULL	
91.70	0.02			100% MUDSTONE	MICACEOUS, LIGHT BROWN.
91.80	0.10			100% COAL, DULL	
92.23	0.43			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
92.33	0.10			100% COAL, DULL	
92.40	0.07			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN.
92.86	0.46			90% COAL, DULL 10% MUDSTONE	LAMINAE, BROWN.
92.91	0.05			100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON CLEAT.
92.99	0.08			100% COAL, DULL	
93.07	0.08			50% CARBONACEOUS SHALE 50% COAL	DARK BROWN. MID LUSTROUS-BRIGHT COAL, LAMINAE. WITH CALCITE ON CLEAT.
93.16	0.09			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
93.68	0.52			100% MUDSTONE	SILTSTONE, GREY, MODERATELY STRONG ROCK.
93.92	0.24			100% MUDSTONE	BENTONITIC, FRIABLE, LIGHT BROWN, VERY WEAK ROCK, VERY STICKY.
94.10	0.18			100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
94.79	0.69			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE B : THICKNESS= 3.16 M; SAMPLED THICKNESS= 0.00 M	
97.10	2.31			100% SILTSTONE	GREY, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 5 DEG.
99.90	2.80			70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	LIGHT GREY. STREAKS, DARK GREY. STRONG ROCK.
100.67	0.77			60% MUDSTONE 40% SANDSTONE	CARBONACEOUS, TRACES, DARK BROWN. VERY FINE GRAINED, LAMINAE, LIGHT GREY.
103.90	3.23			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK, JOINTS DIP 80 DEG., WITH SLICKENSIDES.
110.86	6.96			95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, GREY. TRACES.
111.89	1.03			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.80	6.91			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. LENSES. STRONG ROCK.
121.27	2.47			100% SANDSTONE,MEDIUM GRAINED	GREY, VERY STRONG ROCK.
		TOP OF DALMAYNE C : 148.73 M R.L.			
121.33	0.06			100% COAL, DULL	
122.01	0.68			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN, JOINTS DIP 50 DEG., WITH SLICKENSIDES.
122.41	0.40			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN, VERY WEAK ROCK.
122.75	0.34			100% MUDSTONE	CARBONACEOUS, DARK GREY.
124.83	2.08			100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
125.97	1.14			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
126.13	0.16			100% CARBONACEOUS MUDSTONE	DARK BROWN, STRONG ROCK.
		BASE OF DALMAYNE C : THICKNESS= 4.86 M; SAMPLED THICKNESS= 0.00 M			
126.82	0.69			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
127.80	0.98			80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, DARK BROWN. STRONG ROCK.
137.84	10.04			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, VERY STRONG ROCK.
138.67	0.83			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS. VERY STRONG ROCK.
142.82	4.15			95% SANDSTONE 5% COAL	MED.-FINE GRAINED, GREY. STREAKS. VERY STRONG ROCK.
143.64	0.82			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, VERY STRONG ROCK.
144.20	0.56			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. PELLETAL, GREY-BROWN.
144.41	0.21			80% MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	GREY-BROWN. LENSES, GREY. MODERATELY STRONG ROCK.
144.55	0.14			100% MUDSTONE	FRIABLE, GREY-BROWN, WEAK ROCK.
147.30	2.75			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. PELLETAL, GREY-BROWN. STRONG ROCK.
147.54	0.24			100% SHALE	BROWN, EXTREMELY SRONG ROCK, WITH SAND LINEATION.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
147.57	0.03			100% SANDSTONE,MEDIUM GRAINED	LENSES, GREY.
147.62	0.05			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
147.76	0.14			100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, VERY STRONG ROCK.
147.84	0.08			100% SHALE	LENSES, BROWN, EXTREMELY SRONG ROCK, WITH SAND LINEATION.
147.93	0.09			100% MUDSTONE	CARBONACEOUS, TRACES, GREEN.
148.34	0.41			100% SANDSTONE,MEDIUM GRAINED	GREY, VERY STRONG ROCK.
148.37	0.03			100% MUDSTONE	CARBONACEOUS, TRACES, BROWN.
156.96	8.59			100% SANDSTONE,MEDIUM GRAINED	GREY, VERY STRONG ROCK.
157.11	0.15			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS MUDSTONE	GREY. LENSES, DARK BROWN. STRONG ROCK.
159.53	2.42			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
159.69	0.16			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. GREY. STRONG ROCK.
160.09	0.40			100% MUDSTONE	GREY, WEAK ROCK, VERY STICKY.
160.80	0.71			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK.
162.98	2.18			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
163.49	0.51			80% SANDSTONE,MEDIUM GRAINED 20% COAL	GREY. LENSES. STRONG ROCK.
172.07	8.58			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
172.92	0.85			90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. LENSES. STRONG ROCK.
175.77	2.85			100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK.
179.64	3.87			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK.
		TOP OF DALMAYNE D UPPER : 90.36 M R.L.			
179.74	0.10			100% COAL, DULL	
179.83	0.09			100% CARBONACEOUS MUDSTONE	DARK BROWN.
179.90	0.07			100% COAL, DULL	
		BASE OF DALMAYNE D UPPER : THICKNESS= 0.26 M; SAMPLED THICKNESS= 0.00 M			
179.94	0.04			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
179.99	0.05			100% MUDSTONE	CARBONACEOUS, TRACES, GREY-BROWN.
180.67	0.68			100% SILTSTONE	GREY, MODERATELY STRONG ROCK.
181.25	0.58			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. LENSES, GREY. STRONG ROCK.
181.60	0.35			100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
190.80	9.20			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
198.27	7.47			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, MODERATELY STRONG ROCK.
198.76	0.49			100% SILTSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
198.96	0.20			50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	GREY. GREY-BROWN. MODERATELY WEAK ROCK.
199.79	0.83			100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
212.27	12.48			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, MODERATELY STRONG ROCK.
212.46	0.19			50% SANDSTONE 50% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. LENSES, GREY. STRONG ROCK.
213.23	0.77			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
			TOP OF DALMAYNE D LOWER : 56.77 M R.L.		
213.32	0.09			100% COAL, DULL	
213.36	0.04			100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, MODERATELY WEAK ROCK.
213.39	0.03			100% SANDSTONE,MEDIUM GRAINED	COALY, DARK BROWN, STRONG ROCK.
213.45	0.06			50% COAL, DULL 50% COAL, BRIGHT	BANDS. WITH CALCITE ON CLEAT.
			BASE OF DALMAYNE D LOWER : THICKNESS= 0.22 M; SAMPLED THICKNESS= 0.00 M		
214.38	0.93			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, DARK GREY, MODERATELY WEAK ROCK.
214.42	0.04			100% CARBONACEOUS MUDSTONE	FRIABLE, DARK BROWN.
214.56	0.14			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY-BROWN.
214.68	0.12			100% CARBONACEOUS MUDSTONE	FRIABLE, DARK BROWN, VERY WEAK ROCK.
			TOP OF DALMAYNE D LOWER : 55.32 M R.L.		
214.72	0.04		2271	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.74	0.02		22/1	100% MUDSTONE	GREY-GREEN, VERY WEAK ROCK, VERY STICKY.
214.75	0.01		22/1	100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
214.88	0.13		22/1	100% COAL, DULL	
215.33	0.45		22/1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
215.36	0.03		22/1	100% MUDSTONE	COALY, TRACES, LIGHT BROWN, MODERATELY WEAK ROCK.
215.47	0.11		22/1	100% COAL, DULL	
		BASE OF DALMAYNE D LOWER : THICKNESS= 0.79 M; SAMPLED THICKNESS= 0.79 M			
215.94	0.47			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, MODERATELY WEAK ROCK.
216.03	0.09			100% CARBONACEOUS MUDSTONE	COALY, BANDS, DARK BROWN.
217.80	1.77			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
218.79	0.99			100% SILTSTONE	GREY, MODERATELY WEAK ROCK.
219.19	0.40			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. PELLETAL, DARK GREY.
219.61	0.42			50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY. LENSES, DARK GREY. MODERATELY STRONG ROCK.
223.80	4.19			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
235.20	11.40			100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, STRONG ROCK.
235.29	0.09			50% MUDSTONE 50% SANDSTONE,FINE GRAINED	DARK GREY. GREY. LAMINATED.
235.48	0.19			100% COAL, DULL	
235.57	0.09			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
235.65	0.08			100% MUDSTONE	CARBONACEOUS, DARK BROWN, WEAK ROCK.
235.76	0.11			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, DARK GREY, MODERATELY WEAK ROCK.
236.37	0.61			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
237.33	0.96			50% SILTSTONE 50% MUDSTONE	GREY-BROWN. GREY. MODERATELY STRONG ROCK, LAMINATED.
238.07	0.74			90% SILTSTONE 10% CARBONACEOUS MUDSTONE	GREY-BROWN. STREAKS, DARK GREY.
238.29	0.22			90% SANDSTONE 10% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, GREY. STREAKS, DARK GREY.
238.80	0.51			100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
244.76	5.96			100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY STRONG ROCK.
246.34	1.58			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. STREAKS, DARK GREY. MODERATELY WEAK ROCK.
247.80	1.46			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, MODERATELY WEAK ROCK.
250.33	2.53			50% MUDSTONE 50% SANDSTONE	SILTSTONE, DARK GREY. VERY FINE GRAINED, LAMINAE, GREY.
250.67	0.34			100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
250.70	0.03			100% COAL, DULL	
250.75	0.05			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
250.87	0.12			100% COAL, DULL	
250.88	0.01			100% MUDSTONE	FRIABLE, MICACEOUS, LIGHT BROWN.
250.90	0.02			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
250.92	0.02			100% MUDSTONE	MICACEOUS, LIGHT BROWN.
250.95	0.03			100% CARBONACEOUS SHALE	DARK BROWN, STRONG ROCK.
250.99	0.04			100% MUDSTONE	CARBONACEOUS, DARK GREY.
251.04	0.05			100% SHALE	COALY, BLACK.
252.58	1.54			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
252.68	0.10			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
252.70	0.02			100% COAL, DULL	
252.71	0.01			100% MUDSTONE	MICACEOUS, LIGHT BROWN.
253.05	0.34			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
253.06	0.01			100% COAL, DULL	
253.10	0.04			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
253.15	0.05			100% COAL, DULL	
253.17	0.02			100% MUDSTONE	MICACEOUS, LIGHT BROWN.
253.20	0.03			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
253.33	0.13			100% COAL, DULL	
253.36	0.03			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
253.61	0.25			100% COAL, DULL	
256.22	2.61			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
256.24	0.02			100% MUDSTONE	FRIABLE, LIGHT BROWN.
256.39	0.15			100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.44	0.05			100% SHALE	COALY, DARK BROWN.
256.80	0.36			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
257.71	0.91			100% MUDSTONE	SILTSTONE, GREY.
257.72	0.01			100% MUDSTONE	MICACEOUS, FRIABLE, LIGHT BROWN.
257.78	0.06			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
258.42	0.64			100% MUDSTONE	SILTSTONE, LAMINAE, GREY.
259.25	0.83			50% MUDSTONE 50% SANDSTONE	DARK GREY. VERY FINE GRAINED, GREY.
262.11	2.86			100% MUDSTONE	SILTSTONE, GREY.
262.20	0.09			100% MUDSTONE	CARBONACEOUS, DARK GREY.
262.36	0.16			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
262.56	0.20			100% COAL, DULL	
264.18	1.62			100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEAK ROCK.
264.29	0.11			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
264.56	0.27			100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY.
265.88	1.32			70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	GREY. LAMINAE, DARK BROWN.
265.97	0.09			90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. STREAKS, DARK BROWN. MODERATELY STRONG ROCK.
266.49	0.52			100% MUDSTONE	GREY, WEAK ROCK.
266.53	0.04			100% CARBONACEOUS MUDSTONE	FRIABLE, DARK BROWN, VERY WEAK ROCK.
266.59	0.06			100% COAL, DULL	
266.61	0.02			100% MUDSTONE	FRIABLE, LIGHT BROWN, VERY WEAK ROCK.
266.64	0.03			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
267.49	0.85			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY-BROWN, MODERATELY WEAK ROCK.
268.12	0.63			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
268.17	0.05			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
		TOP OF DALMAYNE E2 : 1.83 M R.L.			
268.35	0.18			100% COAL, DULL	
268.51	0.16			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
268.65	0.14			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS SHALE	GREY. LAMINAE, DARK BROWN. STRONG ROCK.
268.87	0.22			100% COAL, DULL	
268.88	0.01			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
268.93	0.05			100% COAL, DULL	
268.98	0.05			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
269.05	0.07			100% COAL, DULL	
269.08	0.03			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
269.19	0.11			100% COAL, DULL	
				BASE OF DALMAYNE E2 : THICKNESS= 1.02 M; SAMPLED THICKNESS= 0.00 M	
270.26	1.07			70% CARBONACEOUS MUDSTONE 30% CARBONACEOUS SHALE	DARK BROWN. DARK BROWN.
271.77	1.51			100% MUDSTONE	GREY, WEAK ROCK.
276.04	4.27			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
276.82	0.78			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
277.80	0.98			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY-BROWN.
278.25	0.45			100% MUDSTONE	CARBONACEOUS, DARK BROWN, MODERATELY STRONG ROCK.
278.68	0.43			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY STRONG ROCK.
279.23	0.55			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, DARK BROWN. MODERATELY STRONG ROCK.
286.06	6.83			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, STRONG ROCK.
				TOP OF DALMAYNE F : -16.06 M R.L.	
286.67	0.61			100% COAL, DULL	
286.77	0.10			100% CARBONACEOUS MUDSTONE	DARK BROWN, VERY WEAK ROCK.
286.87	0.10			100% CARBONACEOUS MUDSTONE	DARK BROWN, WEAK ROCK.
287.29	0.42			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
287.90	0.61			60% SANDSTONE,MEDIUM GRAINED 40% CARBONACEOUS SHALE	GREY. LAMINAE, DARK BROWN. MODERATELY STRONG ROCK.
288.15	0.25			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
288.41	0.26			100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
288.50	0.09			100% CARBONACEOUS SHALE	DARK BROWN, MODERATELY STRONG ROCK.
288.69	0.19			100% COAL, DULL	
289.31	0.62			100% MUDSTONE	CARBONACEOUS, TRACES, GREY.
289.41	0.10			100% COAL, DULL	
				BASE OF DALHAYNE F : THICKNESS= 3.35 M; SAMPLED THICKNESS= 0.00 M	
289.43	0.02			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
290.55	1.12			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
290.92	0.37			100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
293.21	2.29			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY STRONG ROCK.
293.26	0.05			100% COAL, DULL	
293.43	0.17			100% CARBONACEOUS MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
293.75	0.32			100% MUDSTONE	CARBONACEOUS, TRACES, GREY, MODERATELY WEAK ROCK.
293.80	0.05			50% CARBONACEOUS SHALE 50% COAL	DARK BROWN. MID LUSTROUS-BRIGHT COAL, BANDS. MODERATELY STRONG ROCK.
294.86	1.06			100% MUDSTONE	CARBONACEOUS, BANDS, GREY.
295.80	0.94			50% SANDSTONE 50% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, GREY. LAMINAE, DARK BROWN.
295.87	0.07			50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	GREY. COALY, FRAGMENTS.
296.53	0.66			50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. DARK GREY.
297.04	0.51			70% SANDSTONE,FINE GRAINED 30% MUDSTONE	GREY. DARK GREY.
297.30	0.26			100% MUDSTONE	GREY-BROWN.
297.77	0.47			80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	GREY. DARK BROWN.
297.85	0.08			100% MUDSTONE	BAKED, LIGHT BROWN.
297.88	0.03			100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, EXTREMELY SRONG ROCK.
297.92	0.04			100% MUDSTONE	BAKED, LIGHT BROWN, STRONG ROCK.
298.85	0.93			100% DOLERITE	MEDIUM GRAINED, GREY-GREEN, EXTREMELY SRONG ROCK.
298.86	0.01			100% MUDSTONE	BAKED, LIGHT BROWN, STRONG ROCK.
299.68	0.82			90% MUDSTONE 10% CARBONACEOUS MUDSTONE	BAKED, LIGHT BROWN. LENSES, BAKED, BLACK. STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
303.08	3.40			100% DOLERITE	MEDIUM GRAINED, GREY, EXTREMELY SRONG ROCK.
303.39	0.31			100% MUDSTONE	BAKED, LIGHT BROWN, STRONG ROCK.
304.02	0.63			100% SANDSTONE	SILTSTONE, BAKED, GREY.
304.93	0.91			100% MUDSTONE	GREY.
305.31	0.38			100% SANDSTONE,COARSE GRAINED	PEBBLY, GREY, WITH PEBBLY QUARTZ.
305.32	0.01			100% MUDSTONE	GREY.
306.46	1.14			100% SANDSTONE,COARSE GRAINED	PEBBLY, GREY, WITH PEBBLY QUARTZ.
306.92	0.46			70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY.
307.83	0.91			50% SANDSTONE 50% MUDSTONE	QUARTZOSE, LIGHT GREY. GREY. LAMINATED.
308.39	0.56			100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY.
308.85	0.46			70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	QUARTZOSE, LIGHT GREY. CARBONACEOUS, TRACES, DARK GREY.
310.81	1.96			100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY.
312.13	1.32			100% SILTSTONE	FRIABLE, GREY-GREEN.
312.78	0.65			90% SANDSTONE,FINE GRAINED 10% SILTSTONE	QUARTZOSE, LIGHT GREY. LAMINAE, GREY.
317.11	4.33			100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY.
317.67	0.56			100% SILTSTONE	CARBONACEOUS, TRACES, GREY.
318.26	0.59			100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, LIGHT GREY, EXTREMELY SRONG ROCK.
318.53	0.27			100% MUDSTONE	GREY, WITH PEBBLY QUARTZ.
318.60	0.07			70% MUDSTONE 30% QUARTZITE	GREY. STREAKS.
319.80	1.20			100% MUDSTONE	GREY, WITH PEBBLY QUARTZ.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	91.63 - 94.79 M	3.16 M
DC	0.00 M	121.27 - 126.13 M	4.86 M
DDU	0.00 M	179.64 - 179.90 M	0.26 M
DDL	0.00 M	213.23 - 213.45 M	0.22 M
DDL	0.79 M	214.68 - 215.47 M	0.79 M
DE2	0.00 M	268.17 - 269.19 M	1.02 M
DF	0.00 M	286.06 - 289.41 M	3.35 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
22/1	214.68 - 215.47 M	0.79 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 23

HOLE TYPE	CORE
EASTING	602,100 M AM GRID
NORTHING	5,372,870 M AM GRID
ELEVATION	230.00 M
TOTAL DEPTH DRILLED	361.60 M
DRILLING STARTED	18/ 2/80
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

BOREHOLE : GY 23

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
138.62	138.62			100% DOLERITE	SCREE.
138.92	0.30			100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, MODERATELY WEATHERED, WEAK ROCK.
139.21	0.29			100% SANDSTONE,MEDIUM GRAINED	YELLOW-GREY, MODERATELY WEATHERED, WEAK ROCK.
139.27	0.06			50% PEBBLE CONGLOMERATE 50% SANDSTONE,COARSE GRAINED	YELLOW-GREY. MODERATELY WEATHERED, WEAK ROCK.
139.46	0.19			75% SANDSTONE,COARSE GRAINED 25% PEBBLE CONGLOMERATE	YELLOW-GREY. MODERATELY WEATHERED, WEAK ROCK.
139.62	0.16			100% CARBONACEOUS MUDSTONE	GREY, MODERATELY WEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.
139.83	0.21			100% CARBONACEOUS SHALE	BLACK, WITH PYRITE ON JOINTS AND CALCITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
140.01	0.18			100% SHALE	LAMINAE, LIGHT BROWN, SLIGHTLY WEATHERED, VERY WEAK ROCK.
140.17	0.16			100% CARBONACEOUS SHALE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
140.23	0.06			100% CARBONACEOUS SHALE	DULL COAL, BLACK, SLIGHTLY WEATHL ATELY WEAK ROCK.
140.25	0.02			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MO WEAK ROCK.
140.27	0.02			100% CARBONACEOUS SHALE	DULL COAL, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.29	0.02			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.43	0.14			100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.44	0.01			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.51	0.07			100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.53	0.02			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.56	0.03			100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.57	0.01			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.62	0.05			100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.73	0.11			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
140.75	0.02			100% CARBONACEOUS SHALE	DULL COAL, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
140.81	0.06			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.85	0.04			100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.90	0.05			100% SHALE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
140.95	0.05			100% CARBONACEOUS SHALE	DULL COAL, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
140.97	0.02			100% SHALE	GREY-BROWN, MODERATELY WEATHERED, WEAK ROCK, WITH PLANT REMAINS.
141.96	0.99			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
142.17	0.21			100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
143.17	1.00			100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
144.29	1.12			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
144.83	0.54			100% SANDSTONE,FINE GRAINED	LIMONITIC, LIGHT GREY, STRONG ROCK.
145.26	0.43			100% MUDSTONE	COALY, TRACES, DARK GREY, MODERATELY STRONG ROCK, VERY CLOSE JOINT SPACING, WITH SLICKE[illegible]OINTS DIP 45 DEG.
145.59	0.33			100% SANDSTONE,FINE GRAINED	GREEN-BROWN, MODERATELY WEAK ROCK, LAMI[illegible], VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
146.24	0.65			50% SANDSTONE 50% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY STRONG ROCK, WITH DISTURBED BEDDING.
146.42	0.18	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
148.23	1.81	100		75% SANDSTONE,FINE GRAINED 25% SANDSTONE	GREY. MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. MODERATELY STRONG ROCK.
149.63	1.40	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY STRONG ROCK.
150.03	0.40	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE	LAMINAE, DARK GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY STRONG ROCK.
151.90	1.87	100		100% SANDSTONE	MED.-COARSE GRAINED, CREAM, MODERATELY STRONG ROCK.
151.94	0.04	100		100% SANDSTONE,FINE GRAINED	COALY, PARTINGS, DARK GREY, MODERATELY STRONG ROCK.
153.45	1.51	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED.
153.54	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY STRONG ROCK.
153.76	0.22	100		100% SANDSTONE,FINE GRAINED	LAMINAE, DARK GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
154.06	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
154.46	0.40	100		100% SANDSTONE,FINE GRAINED	LAMINAE, DARK GREY, MODERATELY STRONG ROCK.
154.77	0.31	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
154.92	0.15	100		100% SANDSTONE,FINE GRAINED	LAMINAE, DARK GREY, MODERATELY STRONG ROCK.
155.27	0.35	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
155.46	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
155.65	0.19	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, DARK GREY. MODERATELY STRONG ROCK.
156.59	0.94	100		100% PEBBLE CONGLOMERATE	COALY, LENSES, LIGHT GREY, MODERATELY STRONG ROCK, WITH POOR SORTING.
156.61	0.02	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
157.05	0.44	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
157.10	0.05	100		100% COAL, DULL	
157.13	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
157.21	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
157.22	0.01	100		100% MUDSTONE	COALY, PARTINGS, BROWN, MODERATELY WEAK ROCK.
157.24	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
158.30	1.06	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
159.70	1.40	100		100% MUDSTONE	LABILE, BANDS, CREAM, MODERATELY WEAK ROCK.
159.72	0.02	100		100% CLAY	LIGHT GREEN, STIFF.
160.04	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, WEAK ROCK.
160.64	0.60	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 50 DEG.
161.34	0.70	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
161.42	0.08	100		100% COAL, DULL	
161.55	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
161.65	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
161.79	0.14	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
162.18	0.39	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	DARK GREY. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
164.98	2.80	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
166.00	1.02	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	DARK GREY. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK.
167.55	1.55	100		100% SANDSTONE,MEDIUM GRAINED	COALY, PARTINGS, LIGHT GREY, MODERATELY STRONG ROCK.
167.75	0.20	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK.
169.05	1.30	100		100% SANDSTONE,MEDIUM GRAINED	COALY, PARTINGS, LIGHT GREY, MODERATELY STRONG ROCK.
175.64	6.59	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
175.96	0.32	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK.
182.50	6.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
183.06	0.56	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,FINE GRAINED	DARK GREY. LAMINAE, LIGHT GREY. MODERATELY STRONG ROCK, THICKLY LAMINATED.
183.29	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
183.85	0.56	100		100% SANDSTONE	NON-CLEATED, PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK.
184.34	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
184.41	0.07	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK.
184.90	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
185.00	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, MODERATELY STRONG ROCK.
186.35	1.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
189.90	3.55	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
189.98	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
190.02	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
190.04	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
190.12	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK.
190.17	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
190.19	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
190.21	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
190.23	0.02	100		100% COAL, DULL	
190.35	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
190.41	0.06	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
190.49	0.08	100		100% COAL, INTERBANDED DULL AND BRIGHT	
190.64	0.15	100		100% COAL, DULL	
190.79	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
190.84	0.05	100		100% COAL, BRIGHT	FRAGMENTED, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
193.19	2.35	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
193.58	0.39	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,FINE GRAINED	COALY, BANDS, LIGHT GREY. LAMINAE, GREY. MODERATELY STRONG ROCK.
194.00	0.42	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
194.09	0.09	100		100% COAL, DULL	
194.11	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.12	0.01	100		100% COAL, DULL	UNWEATHERED.
194.35	0.23	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
194.41	0.06	100		100% COAL, DULL	UNWEATHERED.
194.43	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.44	0.01	100		100% COAL, DULL	UNWEATHERED.
194.50	0.06	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.52	0.02	100		100% COAL, DULL	UNWEATHERED.
194.54	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.58	0.04	100		100% COAL, DULL	UNWEATHERED.
194.60	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.78	0.18	100		100% COAL, DULL	UNWEATHERED.
194.86	0.08	100		100% MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
194.97	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
195.15	0.18	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
195.19	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
195.29	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
195.32	0.03	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
195.38	0.06	100		100% COAL, DULL	UNWEATHERED.
195.53	0.15	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
195.61	0.08	100		100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.63	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
195.65	0.02	100		100% COAL, DULL	UNWEATHERED.
195.68	0.03	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
195.76	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
195.78	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
195.86	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
195.88	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
199.68	3.80	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
199.72	0.04	100		100% MUDSTONE	LIMONITIC, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH POOR SORTING.
199.83	0.11	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
200.30	0.47	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
201.46	1.16	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
201.78	0.32	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
201.81	0.03	100		100% CLAY	CREAM, UNWEATHERED, STIFF.
204.14	2.33	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
204.92	0.78	100		60% SILTSTONE 40% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
205.77	0.85	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
209.94	4.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
210.03	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH MUD PELLETS, WITH DISTURBED BEDDING.
210.07	0.04	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
210.68	0.61	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
212.09	1.41	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH TROUGH CROSS BEDDING.
212.73	0.64	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
212.89	0.16	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
213.62	0.73	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.04	0.42	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
214.08	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.33	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
214.46	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.54	0.08	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
214.60	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
214.63	0.03	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
214.69	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
214.76	0.07	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
215.55	0.79	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, WEAK ROCK.
215.64	0.09	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
215.87	0.23	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.89	0.02	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
216.33	0.44	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
216.35	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
216.46	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
216.47	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
216.61	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
216.94	0.33	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.60	0.66	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.99	0.39	100		70% SANDSTONE,COARSE GRAINED 30% CARBONACEOUS MUDSTONE	CARBONACEOUS, LENSES, LIGHT GREY. ARENACEOUS, BLACK. UNWEATHERED, MODERATELY STRONG ROCK, WITH POOR SORTING.
218.34	0.35	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
219.07	0.73	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
219.16	0.09	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
219.71	0.55	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
220.93	1.22	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
222.60	1.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
223.35	0.75	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
223.73	0.38	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
223.84	0.11	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
224.02	0.18	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
224.19	0.17	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
224.22	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
224.36	0.14	100		100% COAL, DULL	
224.37	0.01	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
224.51	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
224.58	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
224.59	0.01	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
224.61	0.02	100		100% COAL, DULL	
224.65	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
224.75	0.10	100		100% COAL, DULL WITH NUMER[illegible]RIGHT BANDS	
224.80	0.05	100		100% COAL, DULL	
225.08	0.28	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
225.09	0.01	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY [illegible] ROCK.
225.10	0.01	100		100% COAL, DULL	
225.14	0.04	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
225.19	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
225.21	0.02	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
225.31	0.10	100		100% COAL, DULL	
225.37	0.06	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
225.41	0.04	100		100% COAL, DULL	
225.42	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
225.69	0.27	100		100% COAL, DULL	
226.60	0.91	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
226.97	0.37	100		100% SANDSTONE,FINE GRAINED	LAMINAE, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
229.41	2.44	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
229.64	0.23	100		100% SANDSTONE,FINE GRAINED	LAMINAE, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
232.85	3.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
233.04	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
235.79	2.75	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
235.86	0.07	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
236.02	0.16	100		100% SANDSTONE,FINE GRAINED	LAMINAE, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
236.28	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
236.33	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
236.45	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
237.21	0.76	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	DARK GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, WITH CONVOLUTED BEDDING.
237.73	0.52	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, BEDS DIP 50 DEG.
237.78	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
238.72	0.94	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
238.77	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
240.19	1.42	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
240.33	0.14	100		100% SILTSTONE	COALY, TRACES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
240.45	0.12	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, POORLY SORTED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
240.64	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
240.77	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
240.82	0.05	100		100% COAL, DULL	
241.72	0.90	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
243.60	1.88	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
243.76	0.16	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. PARTINGS, BLACK. UNWEATHERED, STRONG ROCK.
244.71	0.95	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. RADIOACTIVE, BLACK. UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
244.83	0.12	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, BLACK. LAMINAE, GREY. UNWEATHERED, STRONG ROCK.
245.54	0.71	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. LAMINAE, GREY. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
246.28	0.74	100		80% CARBONACEOUS SHALE 20% SANDSTONE,FINE GRAINED	BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, STRONG ROCK.
246.95	0.67	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS SHALE	COALY, LENSES, LIGHT GREY. COALY, LENSES, BLACK. UNWEATHERED, STRONG ROCK.
247.03	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
247.14	0.11	100		100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, STRONG ROCK.
247.29	0.15	100		100% MUDSTONE	BRIGHT COAL, BANDS, YELLOW-BROWN, UNWEATHERED, WEAK ROCK.
247.51	0.22	100		100% COAL, DULL	
247.71	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
248.48	0.77	100		100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
248.50	0.02	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
248.79	0.29	100		50% CARBONACEOUS MUDSTONE 50% CARBONACEOUS SHALE	LAMINAE, BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY STRONG ROCK.
254.87	6.08	100		100% MUDSTONE	SANDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
255.30	0.43	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS, WITH MUD PELLETS.
255.39	0.09	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
255.57	0.18	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
257.57	2.00	100		100% SANDSTONE,MEDIUM GRAINED	SILTY, STREAKS, GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
257.68	0.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
258.27	0.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
258.34	0.07	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
260.45	2.11	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
260.54	0.09	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK.
261.13	0.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
261.46	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
261.48	0.02	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
262.39	0.91	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
262.58	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
262.61	0.03	100		50% PEBBLE CONGLOMERATE 50% SANDSTONE,COARSE GRAINED	GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
262.79	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK.
262.88	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
263.29	0.41	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
263.36	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS.
264.48	1.12	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK.
265.27	0.79	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
266.52	1.25	100		75% SANDSTONE,MEDIUM GRAINED 15% SILT 10% SANDSTONE,FINE GRAINED	GREY. GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
266.54	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
266.88	0.34	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS. GREY. UNWEATHERED, WITH MUD PELLETS.
266.92	0.04	100		100% COAL, BRIGHT	MUDSTONE, LAMINAE.
266.98	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
267.43	0.45	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY. SILTY, LAMINAE, GREY. UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
267.54	0.11	100		100% SANDSTONE,FINE GRAINED	PEBBLY, GREY, UNWEATHERED, VERY STRONG ROCK.
267.62	0.08	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
267.75	0.13	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	GREY. UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
269.44	1.69	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
270.01	0.57	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
271.60	1.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
277.62	6.02	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
278.05	0.43	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
278.59	0.54	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
280.22	1.63	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK.
280.35	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
283.31	2.96	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
283.62	0.31	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
284.84	1.22	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
284.88	0.04	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
284.94	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
285.20	0.26	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
285.42	0.22	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
287.79	2.37	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
288.33	0.54	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
290.99	2.66	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
291.04	0.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK.
291.46	0.42	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
292.30	0.84	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
292.65	0.35	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
293.54	0.89	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
293.58	0.04	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
295.35	1.77	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
295.41	0.06	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
296.97	1.56	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
297.20	0.23	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
301.33	4.13	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
301.49	0.16	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
301.78	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
301.87	0.09	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
303.55	1.68	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
303.58	0.03	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
303.91	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
304.37	0.46	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
304.55	0.18	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
307.33	2.78	100		100% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
308.56	1.23	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
308.59	0.03	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
308.93	0.34	100		50% SANDSTONE 50% MUDSTONE	MED.-COARSE GRAINED, GREY. SANDSTONE, LENSES, GREY. UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
318.52	9.59	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
318.85	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
318.99	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
319.17	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
319.32	0.15	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
320.43	1.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
320.49	0.06	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
320.65	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
320.77	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
321.18	0.41	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
326.27	5.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
326.56	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
327.41	0.85	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
328.95	1.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
329.01	0.06	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
329.16	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
329.50	0.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
330.77	1.27	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
330.99	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH QUARTZ AND BIOTITE, UNWEATHERED, MODERATELY STRONG ROCK.
332.17	1.18	100		100%	UNWEATHERED, VERY STRONG ROCK.
332.33	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
337.48	5.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
337.56	0.08	100	1	100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
		TOP OF	DALMAYNE D LOWER :-107.56 M R.L.		
337.58	0.02	100	2	100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
337.60	0.02	100	2	100% COAL, HEAVY DULL	
337.73	0.13	100	2	100% COAL, DULL	
337.74	0.01	100	2	100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
337.78	0.04	100	2	100% COAL, HEAVY DULL	
338.29	0.51	100	2	100% COAL, DULL	
338.36	0.07	100	2	100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
338.49	0.13	100	2	100% COAL, DULL	
338.55	0.06	100	2	100% COAL, HEAVY DULL	MUDSTONE, BANDS.
338.76	0.21	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.20 M; SAMPLED THICKNESS= 1.20 M	
340.80	2.04	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
340.85	0.05	100		100% COAL, HEAVY DULL	
341.04	0.19		3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
341.05	0.01		3	100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE D LOWER :-111.05 M R.L.	
341.09	0.04		4	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
341.11	0.02		4	100% MUDSTONE	GREY, WITH LAMINAE OF CALCITE, MODERATELY WEAK ROCK.
341.14	0.03		4	100% COAL, BRIGHT	CARBONACEOUS, BANDS.
341.52	0.38		4	100% COAL, DULL	WITH CALCITE ON CLEAT.
341.57	0.05		4	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
341.66	0.09		4	100% COAL, DULL	
341.78	0.12		4	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
341.99	0.21		4	100% COAL, DULL	
342.00	0.01		4	100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
342.11	0.11		4	100% COAL, DULL	
342.14	0.03		4	100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
342.24	0.10		4	100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.19 M; SAMPLED THICKNESS= 1.19 M	
342.34	0.10			100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
342.41	0.07			100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
342.46	0.05			100% COAL, DULL	
342.68	0.22			100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
343.91	1.23			100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, GREY.
343.96	0.05			100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
345.87	1.91			100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, GREY.
346.60	0.73			100% SANDSTONE,FINE GRAINED	GREY.
348.11	1.51			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
348.34	0.23			100% SANDSTONE,FINE GRAINED	GRADING TO, MEDIUM GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
348.41	0.07			100% SANDSTONE,FINE GRAINED	GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
351.25	2.84			100% SANDSTONE,MEDIUM GRAINED	GREY.
351.32	0.07			100% SANDSTONE	COALY, FRAGMENTS, GREY, WITH CARBONACEOUS WISPS.
351.70	0.38			100% SANDSTONE	MED.-COARSE GRAINED, GREY, WITH CARBONACEOUS WISPS.
351.83	0.13			100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, GREY.
352.02	0.19			100% SANDSTONE,MEDIUM GRAINED	GREY.
353.91	1.89			100% SANDSTONE	MED.-COARSE GRAINED, GREY.
356.59	2.68			100% MUDSTONE	GREY, STRONG ROCK, WITH PLANT REMAINS.
356.67	0.08			100% MUDSTONE	COALY, LAMINAE, GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
357.41	0.74	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
357.47	0.06	100		100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
358.86	1.39	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	GREY. UNWEATHERED, STRONG ROCK.
359.22	0.36	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
359.59	0.37	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK.
359.71	0.12	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
359.91	0.20	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, VERY STRONG ROCK.
359.98	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
360.05	0.07	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, GREY, UNWEATHERED, VERY STRONG ROCK.
360.10	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
360.12	0.02	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
360.15	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
360.16	0.01	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK.
360.33	0.17	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, UNWEATHERED, VERY STRONG ROCK.
361.09	0.76	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
361.60	0.51	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, UNWEATHERED, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DDL	1.20 M	337.56 - 338.76 M	1.20 M
DDL	1.19 M	341.05 - 342.24 M	1.19 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	337.48 - 337.56 M	0.08 M
2	337.56 - 338.76 M	1.20 M
3	340.85 - 341.05 M	0.20 M
4	341.05 - 342.24 M	1.19 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 25

HOLE TYPE	CORE
EASTING	599,975 M AM GRID
NORTHING	5,373,033 M AM GRID
ELEVATION	365.70 M
TOTAL DEPTH DRILLED	594.50 M
DRILLING STARTED	26/ 3/80
DRILLING TIME	
CORE SIZE	63.0 MM
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
232.70	232.70	100		100% DOLERITE	MED.-FINE GRAINED, LIGHT GREY, WITH CALCITE AND TALC.
234.15	1.45	100		100% DOLERITE	MED.-FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, EXTREMELY SRONG ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
234.40	0.25	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, SLIGHTLY WEATHERED, VERY STRONG ROCK.
234.45	0.05	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEATHERED, STRONG ROCK.
235.71	1.26	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, MODERATELY WEATHERED, STRONG ROCK.
235.80	0.09	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, MODERATELY WEATHERED, STRONG ROCK, WITH MUD PELLETS.
238.86	3.06	100		75% SILTSTONE 25% MUDSTONE	GREY. GREY. MODERATELY WEATHERED, MODERATELY STRONG ROCK.
242.55	3.69	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	LIGHT GREY. LIGHT GREY. MODERATELY WEATHERED, STRONG ROCK.
243.18	0.63	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK, BASAL CONTACT DEFORMED.
243.23	0.05	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, MODERATELY WEATHERED, VERY STRONG ROCK.
286.70	43.47	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH NODULES OF PYRITE, UNWEATHERED, EXTREMELY SRONG ROCK, WIDELY SPACED JOINTS.
286.86	0.16	100		100% DOLERITE	VERY FINE GRAINED, GREY-GREEN, UNWEATHERED, EXTREMELY SRONG ROCK.
289.70	2.84	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, LIGHT GREY, EXTREMELY SRONG ROCK.
289.82	0.12	100		100% SILTSTONE	GREY, STRONG ROCK.
290.23	0.41	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
290.28	0.05	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
290.32	0.04	100		100% COAL, HEAVY DULL	
290.35	0.03	100		100% CARBONACEOUS MUDSTONE	GREY, MODERATELY STRONG ROCK.
290.56	0.21	100		100% COAL, HEAVY DULL	
290.64	0.08	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
290.71	0.07	100		100% COAL, DULL	
290.79	0.08	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
290.88	0.09	100		100% SHALE	GREY-BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
291.14	0.26	100		100% COAL, HEAVY DULL	
291.24	0.10	100		100% SHALE	GREY, HIGHLY WEATHERED, WEAK ROCK.
291.30	0.06	100		100% COAL, DULL	
291.39	0.09	100		100% CARBONACEOUS SHALE	BLACK, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
291.62	0.23	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS SHALE	LIGHT GREY. BLACK. SLIGHTLY WEATHERED, VERY STRONG ROCK.
292.61	0.99	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,COARSE GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
293.05	0.44	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS.
293.12	0.07	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
293.47	0.35	100		100% CARBONACEOUS SHALE	HEAVY DULL COAL, BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
293.50	0.03	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
293.84	0.34	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, STRONG ROCK.
294.24	0.40	100		100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, STRONG ROCK.
294.27	0.03	100		100% CARBONACEOUS SHALE	BADLY BROKEN, BLACK, HIGHLY WEATHERED, WEAK ROCK.
294.43	0.16	100		50% CARBONACEOUS SHALE 50% SANDSTONE,FINE GRAINED	BLACK. GREY. UNWEATHERED, STRONG ROCK.
294.63	0.20	100		100% MUDSTONE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
294.68	0.05	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
294.71	0.03	100		100% MUDSTONE	GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
294.80	0.09	100		100% COAL, HEAVY DULL	CARBONACEOUS, SHALY.
294.84	0.04	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, VERY STRONG ROCK.
295.03	0.19	100		100% COAL, HEAVY DULL	CARBONACEOUS, SHALY.
296.53	1.50	100		100% TUFF	FINE GRAINED, GREY-BROWN, WITH FRAGMENTS OF BIOTITE, UNWEATHERED, VERY STRONG ROCK.
296.69	0.16	100		100% COAL, HEAVY DULL	
297.01	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
297.25	0.24	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	BLACK. GREY. UNWEATHERED, STRONG ROCK.
297.37	0.12	100		80% TUFF 20% CARBONACEOUS MUDSTONE	GREY-BROWN. BLACK. UNWEATHERED, STRONG ROCK.
297.48	0.11	100		100% CARBONACEOUS SHALE	HEAVY DULL COAL.
297.87	0.39	100		50% CARBONACEOUS SHALE 50% TUFF	BLACK. GREY-BROWN. UNWEATHERED, STRONG ROCK.
298.19	0.32	100		100% TUFF	GREY-BROWN.
298.34	0.15	100		100% CARBONACEOUS SHALE	BLACK.
298.64	0.30	100		100% COAL, HEAVY DULL	DULL COAL.
298.68	0.04	100		100% MUDSTONE	GREY.
298.92	0.24	100		100% MUDSTONE	GREY, WITH PLANT REMAINS.
301.13	2.21	100		100% MUDSTONE	GREY.
304.71	3.58	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY.
305.85	1.14	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. WITH PLANT REMAINS.
305.90	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
306.40	0.50	100		100% COAL, DULL	
308.64	2.24	100		100% MUDSTONE	GREY, STRONG ROCK, WITH PLANT REMAINS.
308.69	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK.
308.79	0.10	100		100% MUDSTONE	GREY.
308.88	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK.
309.13	0.25	100		100% MUDSTONE	GREY.
309.68	0.55	100		100% TUFF	GREY-BROWN.
309.74	0.06	100		100% TUFF	GREY-BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
309.99	0.25	100		100% COAL, HEAVY DULL	DULL COAL.
313.12	3.13	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
313.40	0.28	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
315.16	1.76	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	MUDSTONE, BANDS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK.
315.23	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
315.31	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
315.33	0.02	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
315.35	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
315.43	0.08	100		100% MUDSTONE	CREAM, COMPLETELY WEATHERED, VERY WEAK ROCK.
315.44	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
315.58	0.14	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
315.96	0.38	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
316.04	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
316.10	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
316.17	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
316.32	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
319.02	2.70	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
319.13	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
319.71	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
319.83	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS.
322.17	2.34	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
322.81	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
322.91	0.10	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
322.96	0.05	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
323.03	0.07	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
327.73	4.70	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
329.08	1.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
329.14	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
329.32	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
329.62	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
329.91	0.29	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
330.48	0.57	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
330.94	0.46	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
332.12	1.18	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
332.26	0.14	100		100% COAL, DULL	
332.30	0.04	100		100% CARBONACEOUS SHALE	BROWN-BLACK, UNWEATHERED, VERY STRONG ROCK.
332.45	0.15	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
332.50	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED, STRONG ROCK.
332.51	0.01			100% CARBONACEOUS SHALE	
332.54	0.03			100% CARBONACEOUS SHALE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
332.58	0.04			100% CARBONACEOUS SHALE	
332.84	0.26			100% COAL, HEAVY DULL	
332.87	0.03			100% CARBONACEOUS SHALE	COALY, TRACES, BROWN, UNWEATHERED, STRONG ROCK.
332.93	0.06			100% MUDSTONE	COALY, FRAGMENTS, GREY-BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
332.96	0.03			100% COAL, HEAVY DULL	
333.01	0.05			100% COAL, BRIGHT	
333.16	0.15			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.
333.22	0.06			100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
333.28	0.06			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.
333.32	0.04			100% COAL, DULL	
333.38	0.06			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
333.42	0.04			100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY STRONG ROCK.
333.54	0.12			100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
334.04	0.50			100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
336.06	2.02			60% MUDSTONE 40% SANDSTONE,FINE GRAINED	FINE GRAINED SANDSTONE, LAMINAE, GREY. MUDSTONE, LAMINAE, LIGHT GREY. UNWEATHERED, STRONG ROCK.
336.39	0.33			75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK.
337.69	1.30			100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
338.78	1.09			100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
338.88	0.10			100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, STRONG ROCK.
338.95	0.07			100% COAL, HEAVY DULL	
338.98	0.03			100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
339.01	0.03			100% COAL, DULL	
339.04	0.03			100% MUDSTONE	COALY, TRACES, BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
339.09	0.05			100% COAL, BRIGHT WITH FEW DULL BANDS	
339.32	0.23			100% COAL, HEAVY DULL	
339.51	0.19			100% COAL, DULL	
339.54	0.03			100% MUDSTONE	BROWN, UNWEATHERED, VERY STRONG ROCK.
339.83	0.29			100% COAL, HEAVY DULL	
339.88	0.05			100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, VERY STRONG ROCK.
340.03	0.15			100% COAL, DULL	
340.11	0.08			100% SANDSTONE,MEDIUM GRAINED	DARK BROWN, UNWEATHERED, VERY STRONG ROCK.
340.16	0.05			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.
340.21	0.05			100% COAL, DULL	
340.31	0.10	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, VERY STRONG ROCK.
340.33	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, STRONG ROCK.
340.43	0.10	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, STRONG ROCK.
340.62	0.19	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	BROWN. LIGHT GREY. MODERATELY WEATHERED, MODERATELY STRONG ROCK.
340.75	0.13	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
340.87	0.12	100		100% MUDSTONE	GREEN-BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
340.94	0.07	100		100% COAL, HEAVY DULL	
341.00	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
341.04	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT.
341.12	0.08	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
341.19	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK.
341.20	0.01	100		100% COAL, BRIGHT	
341.35	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
341.38	0.03	100		100% COAL, HEAVY DULL	
341.53	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS.
341.84	0.31	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
343.10	1.26	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	MUDSTONE, BANDS, LIGHT GREY. FINE GRAINED SANDSTONE, BANDS, GREY. UNWEATHERED, VERY STRONG ROCK.
343.83	0.73	100		100% MUDSTONE	GREY, VERY STRONG ROCK.
344.47	0.64	100		100% MUDSTONE	GREY, VERY STRONG ROCK, WITH PLANT REMAINS.
344.56	0.09	100		100% CARBONACEOUS MUDSTONE	CREAM, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
344.58	0.02	100		100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
344.62	0.04	100		100% CARBONACEOUS MUDSTONE	CREAM, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
344.70	0.08	100		100% COAL, DULL	
344.72	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK.
344.82	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
344.88	0.06	100		100% MUDSTONE	CREAM, MODERATELY WEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
345.00	0.12	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
345.03	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
345.05	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
345.07	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
345.09	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
345.15	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
345.17	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
345.22	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
345.24	0.02	100		100% COAL, BRIGHT	
345.33	0.09	100		100% COAL, HEAVY DULL	
345.35	0.02	100		100% COAL, BRIGHT	
345.53	0.18	100		100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
346.33	0.80	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
346.36	0.03	100		100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
346.45	0.09	100		100% SHALE	BROWN, MODERATELY WEATHERED, WEAK ROCK.
346.48	0.03	100		100% CARBONACEOUS SHALE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
346.52	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-BROWN, UNWEATHERED, STRONG ROCK.
346.59	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
346.64	0.05	100		100% COAL, HEAVY DULL	
346.93	0.29	100		100% CARBONACEOUS SHALE	BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
346.96	0.03	100		100% SHALE	LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
347.01	0.05	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, VERY STRONG ROCK.
347.02	0.01	100		100% SHALE	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
347.09	0.07	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, VERY STRONG ROCK.
347.27	0.18	100		100% SHALE	GREY-GREEN, HIGHLY WEATHERED, WEAK ROCK.
347.30	0.03	100		100% SHALE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
347.39	0.09	100		100% SHALE	GREY-GREEN, HIGHLY WEATHERED, WEAK ROCK.
347.44	0.05	100		100% SHALE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
347.59	0.15	100		100% SHALE	GREY-GREEN, HIGHLY WEATHERED, WEAK ROCK.
347.66	0.07	100		100% COAL, HEAVY DULL	
347.77	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK.
348.53	0.76	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
348.56	0.03	100		100% MUDSTONE	CREAM, MODERATELY WEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
350.44	1.88	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
350.62	0.18	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
351.73	1.11	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.
352.39	0.66	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, STRONG ROCK.
352.99	0.60	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
353.15	0.16	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.
354.51	1.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
				TOP OF DALMAYNE B : 11.19 M R.L.	
354.52	0.01	100		100% COAL, BRIGHT	
354.58	0.06	100		100% COAL, HEAVY DULL	CARBONACEOUS.
354.64	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT.
354.73	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, STRONG ROCK.
354.76	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
354.94	0.18	100		100% CARBONACEOUS MUDSTONE	LIGHT GREEN, HIGHLY WEATHERED, WEAK ROCK.
355.09	0.15	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
355.64	0.55	100		100% SHALE	LIGHT GREEN, COMPLETELY WEATHERED, WEAK ROCK.
355.74	0.10	100		100% CARBONACEOUS SHALE	BROWN-BLACK, UNWEATHERED, STRONG ROCK.
355.81	0.07	100		100% SHALE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, SLIGHTLY WEATHERED, STRONG ROCK.
355.87	0.06	100		100% CARBONACEOUS SHALE	BROWN-BLACK, UNWEATHERED, STRONG ROCK.
356.05	0.18	100		100% CARBONACEOUS SHALE	COALY, BROWN-BLACK, UNWEATHERED, STRONG ROCK.
356.08	0.03	100		100% SHALE	LIGHT GREEN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
356.37	0.29	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
356.47	0.10	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
356.52	0.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
356.58	0.06	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
356.68	0.10	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS SHALE	LIGHT GREY. BLACK. UNWEATHERED, VERY STRONG ROCK.
356.78	0.10	100		100% MUDSTONE	SANDSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
357.54	0.76	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.
357.89	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
357.99	0.10	100		100% MUDSTONE	LIGHT GREEN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
358.15	0.16	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
358.47	0.32	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	CARBONACEOUS, LIGHT GREY. CARBONACEOUS, GREY. UNWEATHERED, STRONG ROCK.
358.61	0.14	100		100% CARBONACEOUS SHALE	COALY, FRAGMENTS, BROWN-BLACK, UNWEATHERED, STRONG ROCK.
358.77	0.16	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
359.54	0.77	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
359.64	0.10	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
359.83	0.19	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, STRONG ROCK.
359.98	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.
360.11	0.13	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
360.12	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY STRONG ROCK.
360.18	0.06	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
360.53	0.35	100		90% CARBONACEOUS MUDSTONE 10% SHALE	COALY, TRACES, BLACK. CREAM. UNWEATHERED, STRONG ROCK.
360.56	0.03	100		100% SHALE	CREAM, MODERATELY WEATHERED, WEAK ROCK.
360.82	0.26	100		75% CARBONACEOUS MUDSTONE 25% SHALE	BLACK. CREAM. UNWEATHERED, STRONG ROCK.
360.97	0.15	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, STRONG ROCK.
361.00	0.03	100		100% SANDSTONE,FINE GRAINED	DARK GREY, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
361.13	0.13	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, VERY STRONG ROCK.
361.18	0.05	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, STRONG ROCK.
361.25	0.07	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, STRONG ROCK.
361.30	0.05	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT BROWN, SLIGHTLY WEATHERED, STRONG ROCK.
361.48	0.18	100		100% CARBONACEOUS MUDSTONE	COALY, TRACES, BLACK, UNWEATHERED, STRONG ROCK.
361.53	0.05	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
361.67	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, STRONG ROCK.
361.68	0.01	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
361.70	0.02	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, STRONG ROCK.
361.93	0.23	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, UNWEATHERED, STRONG ROCK.
362.24	0.31	100		100% CARBONACEOUS MUDSTONE	FINE GRAINED SANDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
362.36	0.12	100		100% MUDSTONE	BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
362.73	0.37	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK, HIGHLY WEATHERED, WEAK ROCK.
363.29	0.56	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	BLACK. GREY. UNWEATHERED, STRONG ROCK.
363.82	0.53	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, STRONG ROCK.
363.86	0.04	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
364.12	0.26	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, STRONG ROCK.
364.17	0.05	100		100% SHALE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
364.37	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
364.97	0.60	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, CREAM, HIGHLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
365.20	0.23	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, STRONG ROCK.
365.28	0.08	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
365.55	0.27	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, STRONG ROCK.
365.70	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
365.74	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
366.28	0.54	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.
367.68	1.40	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK.
367.70	0.02	100		100% SANDSTONE,FINE GRAINED	DARK GREY, UNWEATHERED, STRONG ROCK.
369.48	1.78	100		100% MUDSTONE	COALY, TRACES, GREY, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
369.67	0.19	100		100% MUDSTONE	CREAM, WITH STREAKS OF CALCITE, HIGHLY WEATHERED, WEAK ROCK.
370.59	0.92	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
370.80	0.21	100		100% COAL, DULL	
370.84	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, STRONG ROCK.
371.05	0.21	100		100% COAL, DULL	
371.07	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
371.27	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, STRONG ROCK.
371.37	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
371.62	0.25	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, STRONG ROCK.
			BASE OF DALMAYNE B : THICKNESS= 17.11 M; SAMPLED THICKNESS= 0.00 M		
371.72	0.10	100		100% MUDSTONE	COARSE GRAINED, FRAGMENTS, GREY, UNWEATHERED, STRONG ROCK.
371.86	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COARSE GRAINED, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
371.96	0.10	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
373.60	1.64	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
373.70	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
373.74	0.04	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
379.70	5.96	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
382.26	2.56	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH QUARTZ.
382.36	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
383.49	1.13	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
383.58	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
383.81	0.23	100		100% SANDSTONE,FINE GRAINED	COALY, TRACES, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
384.40	0.59	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
385.06	0.66	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
385.66	0.60	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY. COALY, STREAKS, LIGHT GREY. UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
385.86	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
386.14	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
386.56	0.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
387.68	1.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
387.88	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
388.07	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
388.40	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
388.59	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
389.50	0.91	100		100% MUDSTONE	SILTSTONE, LENSES, GREY, UNWEATHERED, STRONG ROCK.
389.52	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK.
389.60	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
389.70	0.10	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, STRONG ROCK.
389.81	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
389.90	0.09	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
391.13	1.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
391.73	0.60	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
392.23	0.50	100		50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
392.38	0.15	100		75% CARBONACEOUS MUDSTONE 25% SANDSTONE,FINE GRAINED	BLACK. LIGHT GREY.
392.45	0.07	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
393.05	0.60	100		100% MUDSTONE	COALY, LAMINAE, GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
393.60	0.55	100		100% MUDSTONE	GYPSIFEROUS, HIGHLY WEATHERED, WEAK ROCK.
393.97	0.37	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	LIGHT GREY. BLACK. UNWEATHERED, VERY STRONG ROCK.
394.10	0.13	100		75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
				TOP OF DALMAYNE C : -28.40 M R.L.	
394.30	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
394.93	0.63	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, LENSES, BLACK, UNWEATHERED, STRONG ROCK.
395.57	0.64	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
395.79	0.22	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, WEAK ROCK.
395.83	0.04	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
				BASE OF DALMAYNE C : THICKNESS= 1.73 M; SAMPLED THICKNESS= 0.00 M	
395.89	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
397.42	1.53	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
397.46	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
397.60	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, VERY WIDELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
399.00	1.40	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
401.35	2.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
404.68	3.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
404.89	0.21	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
405.48	0.59	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
405.71	0.23	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
405.76	0.05	100		100% COAL, BRIGHT	
405.80	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
406.03	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
406.62	0.59	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
406.70	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
407.43	0.73	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
407.54	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
407.77	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
407.91	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
408.64	0.73	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
410.18	1.54	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
411.36	1.18	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
411.80	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
413.32	1.52	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
413.60	0.28	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
415.12	1.52	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
415.20	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
415.50	0.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
417.35	1.85	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
417.49	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
418.67	1.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
421.62	2.95	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
421.71	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
422.06	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
422.77	0.71	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
423.84	1.07	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
427.70	3.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
428.09	0.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
428.48	0.39	100		100% TUFF	WHITE, UNWEATHERED, EXTREMELY SRONG ROCK.
430.38	1.90	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, MODERATELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
430.56	0.18	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
430.63	0.07	100		100% COAL, DULL	
430.77	0.14	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK.
431.47	0.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
431.52	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
432.09	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
432.55	0.46	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
433.01	0.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
433.54	0.53	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
433.75	0.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
435.31	1.56	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
435.58	0.27	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
437.83	2.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
437.98	0.15	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
438.58	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
438.73	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.
439.31	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
439.34	0.03	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
439.70	0.36	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
440.18	0.48	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
442.13	1.95	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
442.31	0.18	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
442.76	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
443.36	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
445.29	1.93	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
446.40	1.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
446.58	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
448.63	2.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
448.68	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
448.70	0.02	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
448.83	0.13	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
448.90	0.07	100		100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
449.70	0.80	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
450.20	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
451.95	1.75	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF DALMAYNE D UPPER : -86.25 M R.L.	
452.09	0.14	100		100% COAL, DULL	
452.37	0.28	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.42 M; SAMPLED THICKNESS= 0.00 M	
453.15	0.78	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
454.39	1.24	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK.
454.46	0.07	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, STRONG ROCK.
455.88	1.42	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
456.64	0.76	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
456.70	0.06	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
456.97	0.27	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
457.14	0.17	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
457.25	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
457.45	0.20	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	COARSE GRAINED, BANDS, GREY. GREY. UNWEATHERED, STRONG ROCK.
457.77	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
457.84	0.07	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
458.10	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
458.30	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
458.76	0.46	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. GREY. UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
460.43	1.67	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
460.73	0.30	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
461.16	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
461.20	0.04	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
462.85	1.65	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, VERY WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
463.46	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
463.77	0.31	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
464.27	0.50	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
464.65	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
465.59	0.94	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
466.04	0.45	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
466.57	0.53	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
466.81	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
467.19	0.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
467.59	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
469.30	1.71	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
469.70	0.40	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
470.20	0.50	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
470.95	0.75	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
470.99	0.04	100		100% COAL	BROWN.
472.70	1.71	60		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
473.43	0.73	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 25 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
473.53	0.10			75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, VERY STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
473.84	0.31			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
		TOP OF DALMAYNE D LOWER :-108.14 M R.L.			
473.93	0.09		1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, STRONG ROCK.
474.18	0.25		1	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
474.31	0.13		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
474.49	0.18		1	100% COAL, DULL	
474.53	0.04		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
474.55	0.02		1	100% COAL, BRIGHT	
474.64	0.09		1	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS.
475.07	0.43		1	100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 40 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
475.17	0.10		1	100% MUDSTONE	GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
475.33	0.16		2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, DARK GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
475.47	0.14		3	100% COAL, DULL WITH FEW BRIGHT BANDS	
475.52	0.05		3	100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
475.70	0.18	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
475.76	0.06	100	3	100% COAL, DULL	
475.78	0.02	100	3	100% TONSTEIN	
475.84	0.06	100	3	100% COAL, DULL	
475.85	0.01	100	3	100% CLAY	
475.98	0.13	100	3	100% COAL, DULL	
476.17	0.19	100	3	100% COAL, HEAVY DULL	
476.38	0.21	100	3	100% COAL, DULL	
476.52	0.14	100	3	100% COAL, HEAVY DULL	
476.61	0.09	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
476.69	0.08	100	3	100% COAL, DULL	
477.01	0.32	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	
477.03	0.02	100	3	100% COAL, BRIGHT	
477.08	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
477.09	0.01	100		100% COAL, BRIGHT	
477.43	0.34	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
477.66	0.23	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
477.76	0.10	100	4	100% CARBONACEOUS MUDSTONE	COALY.
477.94	0.18	100	4	100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
477.96	0.02	100	4	100% TONSTEIN	
478.03	0.07	100	4	100% COAL, DULL WITH FEW BRIGHT BANDS	
478.12	0.09	100	4	100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
478.52	0.40	100	5	100% COAL, DULL	WITH CALCITE ON CLEAT.
478.53	0.01	100	5	100% CLAY	
478.70	0.17	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
478.71	0.01	100	5	100% COAL, DULL	
478.73	0.02	100	5	100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
478.87	0.14	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
479.15	0.28	100	5	100% COAL, DULL	
479.16	0.01	100	5	100% CLAY	
479.21	0.05	100	5	100% COAL, HEAVY DULL	
479.34	0.13	100	5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
				BASE OF DALMAYNE D LOWER : THICKNESS= 5.50 M; SAMPLED THICKNESS= 4.87 M	
479.49	0.15	100	6	100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
479.52	0.03	100	6	100% CARBONACEOUS MUDSTONE	COALY.
479.59	0.07	100	6	100% COAL, DULL	WITH CALCITE ON CLEAT.
480.05	0.46	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
480.11	0.06	100		100% CARBONACEOUS MUDSTONE	
480.20	0.09	100		100% COAL, HEAVY DULL	
480.24	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
480.27	0.03	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
483.10	2.83	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. GREY. UNWEATHERED, STRONG ROCK.
485.03	1.93	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
486.45	1.42	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
486.60	0.15	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
497.24	10.64	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
497.31	0.07	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRIABLE, LIGHT GREY, STRONG ROCK.
497.37	0.06	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY.
497.42	0.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRIABLE, LIGHT GREY.
498.60	1.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
498.78	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY.
504.00	5.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
504.08	0.08	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY.
508.31	4.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
508.39	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
509.35	0.96	100		100% MUDSTONE	GREY.
509.37	0.02	100		100% COAL, DULL	
509.38	0.01	100		100% MUDSTONE	BROWN.
509.39	0.01	100		100% COAL, BRIGHT	BADLY BROKEN.
510.57	1.18	100		100% MUDSTONE	GREY.
512.23	1.66	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	COALY, TRACES, LIGHT GREY. GREY. MODERATELY WEAK ROCK.
513.44	1.21	100		100% MUDSTONE	GREY.
513.98	0.54	100		100% CARBONACEOUS MUDSTONE	BLACK.
514.33	0.35	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK.
514.49	0.16	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE,COARSE GRAINED	BLACK. BANDS, LIGHT GREY.
514.95	0.46	100		100% CARBONACEOUS MUDSTONE	BLACK.
516.37	1.42	100		100% MUDSTONE	GREY.
516.97	0.60	100		85% CARBONACEOUS MUDSTONE 15% SANDSTONE,FINE GRAINED	BLACK. BANDS, LIGHT GREY.
517.69	0.72	100		100% MUDSTONE	GREY, WITH TROUGH CROSS BEDDING.
517.83	0.14	100		100% MUDSTONE	GREY.
517.94	0.11	100		100% COAL, DULL	BRIGHT COAL, BANDS, WITH CALCITE ON CLEAT, UNWEATHERED, WITH PLANT REMAINS.
518.05	0.11	100		100% CARBONACEOUS SHALE	HIGHLY WEATHERED.
518.21	0.16	100		100% CARBONACEOUS SHALE	ARENACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
518.32	0.11	100		100% MUDSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
518.34	0.02	100		100% CARBONACEOUS MUDSTONE	
518.38	0.04	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
518.75	0.37	100		100% COAL, DULL	WITH CALCITE ON CLEAT.
518.86	0.11	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
520.94	2.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
521.13	0.19	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
521.17	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
521.56	0.39	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT NON PLANAR, WITH SLICKENSIDES.
522.71	1.15	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, STREAKS, GREY. MODERATELY STRONG ROCK, VERY THINLY BEDDED, LAMINATED.
525.56	2.85	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, LIGHT GREY. LIGHT GREY. MODERATELY STRONG ROCK.
525.78	0.22	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
525.84	0.06	100		100% MUDSTONE	DARK BROWN, WEAK ROCK.
525.87	0.03	100		100% MUDSTONE	BROWN, FIRM.
526.23	0.36	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
526.29	0.06	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
526.35	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN.
526.37	0.02	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
526.44	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN.
527.49	1.05	100		100% MUDSTONE	DARK GREY.
527.52	0.03	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN.
528.09	0.57	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY.
528.23	0.14	100		100% MUDSTONE	GREY.
528.25	0.02	100		100% COAL, DULL	
528.50	0.25	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
528.56	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
528.76	0.20	100		100% MUDSTONE	GREY.
531.93	3.17	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY.
532.03	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
532.07	0.04	100		100% CLAY	BROWN, SOFT.
532.11	0.04	100		100% COAL, BRIGHT	
532.13	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK.
532.33	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, GREY.
533.16	0.83	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	LAMINATED.
533.27	0.11	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BLACK.
533.68	0.41	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, CARBONACEOUS, BLACK. GREY. THICKLY LAMINATED.
533.72	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, CREAM.
534.18	0.46	100		70% SANDSTONE 30% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, CARBONACEOUS, BLACK. GREY.
				TOP OF DALMAYNE E2 :-168.48 M R.L.	
534.79	0.61	100		100% COAL, HEAVY DULL	
				BASE OF DALMAYNE E2 : THICKNESS= 0.61 M; SAMPLED THICKNESS= 0.00 M	
534.91	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH CALCITE ON CLEAT.
535.47	0.56	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
536.39	0.92	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
536.48	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
537.25	0.77	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
538.70	1.45	100		100% SANDSTONE	VERY FINE GRAINED, BADLY BROKEN, GREY.
541.03	2.33	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
541.11	0.08	100		100% MUDSTONE	BROWN, FIRM.
542.59	1.48	100		100% MUDSTONE	ARENACEOUS, DARK BROWN, MODERATELY WEAK ROCK.
542.94	0.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK.
543.19	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY.
543.63	0.44	100		65% SANDSTONE,FINE GRAINED 35% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK. LIGHT GREY. LAMINATED.
543.86	0.23	100		100% SANDSTONE,FINE GRAINED	GREY.
546.28	2.42	100		100% SANDSTONE	VERY FINE GRAINED, GREY, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
546.80	0.52	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY.
547.03	0.23	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
547.11	0.08	100		100% SANDSTONE	VERY FINE GRAINED, GREY, LAMINATED.
547.97	0.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
548.07	0.10	100		100% SANDSTONE	VERY FINE GRAINED, PEBBLY, GREY.
548.54	0.47	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
548.89	0.35	100		100% CARBONACEOUS SHALE	ARENACEOUS, BLACK.
549.05	0.16	100		100% CARBONACEOUS SHALE	BLACK.
549.33	0.28	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, BLACK.
549.39	0.06	100		100% COAL, DULL	
549.42	0.03	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK.
549.44	0.02	100		100% MUDSTONE	BROWN.
549.60	0.16	100		100% COAL, HEAVY DULL	
549.65	0.05	100		100% MUDSTONE	BROWN, WITH DISTURBED BEDDING.
549.72	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
549.75	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
550.23	0.48	100		100% CARBONACEOUS MUDSTONE	BLACK.
550.60	0.37	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	LIGHT GREY. CARBONACEOUS, BLACK. LAMINATED.
550.72	0.12	100		100% SANDSTONE	VERY FINE GRAINED, CARBONACEOUS, BLACK.
551.07	0.35	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN.
551.23	0.16	100		100% SANDSTONE,MEDIUM GRAINED	GREY.
551.33	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY.
551.42	0.09	100		100% SANDSTONE,FINE GRAINED	GREY, WITH PEBBLY QUARTZ.
552.05	0.63	100		100% MUDSTONE	GREY.
552.17	0.12	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY.
552.37	0.20	100		100% MUDSTONE	GREY.
552.48	0.11	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WITH TROUGH CROSS BEDDING.
552.97	0.49	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
553.54	0.57	100		100% MUDSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
553.72	0.18	100		50% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. GREY. DETRITAL. THICKLY LAMINATED, LAMINATED.
554.40	0.68	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
554.89	0.49	100		100% MUDSTONE	GREY, LAMINATED.
555.11	0.22	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY.
558.44	3.33	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE	BADLY BROKEN, LIGHT GREY. VERY FINE GRAINED, CARBONACEOUS, BLACK. VERY THINLY BEDDED, LAMINATED.
558.51	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY.
559.08	0.57	100		100% MUDSTONE	GREY.
559.22	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK.
559.23	0.01	100		100% SANDSTONE,FINE GRAINED	GREY.
559.63	0.40	100		100% MUDSTONE	GREY.
559.70	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK.
560.40	0.70	100		100% MUDSTONE	GREY.
560.53	0.13	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BROWN.
560.89	0.36	100		100% SANDSTONE	MED.-FINE GRAINED, DARK BROWN, VERY THINLY BEDDED.
561.06	0.17	100		100% CARBONACEOUS MUDSTONE	BLACK.
561.20	0.14	100		100% MUDSTONE	LIGHT GREY, VERY WEAK ROCK.
561.39	0.19	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK.
561.42	0.03	100		100% COAL, BRIGHT	BADLY BROKEN.
563.68	2.26	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY THINLY BEDDED, WITH BURROWING.
564.50	0.82	100		100% MUDSTONE	GREY.
565.45	0.95	100		100% SANDSTONE,FINE GRAINED	GREY.
566.80	1.35	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
567.43	0.63	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, VERY THINLY BEDDED, WITH BURROWING.
568.26	0.83	100		100% MUDSTONE	GREY.
568.31	0.05	100		100% COAL, BRIGHT	
568.42	0.11	100		100% MUDSTONE	GREY.
569.40	0.98	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH BURROWING.
569.50	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY.
569.68	0.18	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
570.61	0.93	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH CARBONACEOUS WISPS.
570.93	0.32	100		100% MUDSTONE	DARK GREY.
571.04	0.11	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
571.98	0.94	100		100% MUDSTONE	GREY.
572.46	0.48	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, COARSE GRAINED, LIGHT GREY.
572.52	0.06	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, DARK BROWN.
572.63	0.11	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, WITH POOR SORTING.
572.69	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK.
573.09	0.40	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT BROWN, WITH POOR SORTING.
573.31	0.22	100		100% SANDSTONE,FINE GRAINED	DARK GREY.
581.38	8.07	100		100% SANDSTONE	MED.-COARSE GRAINED, CREAM, WITH CARBONACEOUS WISPS.
581.98	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY.
582.39	0.41	100		100% SANDSTONE,FINE GRAINED	GREY, LAMINATED.
586.58	4.19	100		100% SANDSTONE	MED.-COARSE GRAINED, CREAM.
589.02	2.44	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY.
594.50	5.48	100		100% MUDSTONE	DARK GREY, WITH PEBBLY QUARTZ.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	354.51 - 371.62 M	17.11 M
DC	0.00 M	394.10 - 395.83 M	1.73 M
DDU	0.00 M	451.95 - 452.37 M	0.42 M
DDL	4.87 M	473.84 - 479.34 M	5.50 M
DE2	0.00 M	534.18 - 534.79 M	0.61 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	473.84 - 475.17 M	1.33 M
2	475.17 - 475.33 M	0.16 M
3	475.33 - 477.03 M	1.70 M
4	477.66 - 478.12 M	0.46 M
5	478.12 - 479.34 M	1.22 M
6	479.34 - 479.59 M	0.25 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 27

HOLE TYPE	CORE
EASTING	597,989 M AM GRID
NORTHING	5,373,075 M AM GRID
ELEVATION	453.10 M
TOTAL DEPTH DRILLED	388.70 M
DRILLING STARTED	29/ 4/80
DRILLING TIME	
CORE SIZE	63.0 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
6.85	6.85	80		60% DOLERITE 40% MUDSTONE	SCREE. FRAGMENTS.
7.80	0.95	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEATHERED, WEAK ROCK, WITH MUD PELLETS.
11.69	3.89	100		100% MUDSTONE	CALCITIC, STREAKS, GREY-GREEN, MODERATELY WEATHERED, WEAK ROCK.
12.40	0.71	100		100% MUDSTONE	GREY-GREEN, WITH MUD PELLETS.
13.90	1.50	100		100% MUDSTONE	GREY-GREEN, COMPLETELY WEATHERED, VERY WEAK ROCK.
14.15	0.25	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEATHERED, WEAK ROCK.
14.21	0.06	100		100% MUDSTONE	RED-BROWN, MODERATELY WEATHERED.
14.43	0.22	100		100% MUDSTONE	CALCITIC, STREAKS, GREY-GREEN, MODERATELY WEATHERED.
15.22	0.79	100		80% MUDSTONE 20% MUDSTONE	GREY-GREEN. RED-BROWN. MODERATELY WEATHERED.
16.84	1.62	100		100% MUDSTONE	CALCITIC, STREAKS, GREY-GREEN, MODERATELY WEATHERED, WITH MUD PELLETS.
16.94	0.10	100		100% MUDSTONE	RED-BROWN, MODERATELY WEATHERED.
17.53	0.59	100		100% MUDSTONE	CALCITIC, STREAKS, GREY-GREEN, MODERATELY WEATHERED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG.
18.37	0.84	100		80% MUDSTONE 20% MUDSTONE	GREY-GREEN. RED-BROWN. MODERATELY WEATHERED.
18.41	0.04	100		100% MUDSTONE	CALCITIC, STREAKS, GREEN-BROWN, MODERATELY WEATHERED.
40.70	22.29	100		80% MUDSTONE 20% MUDSTONE	CALCITIC, STREAKS, GREY-GREEN. RED-BROWN. MODERATELY WEATHERED, WITH MUD PELLETS.
43.76	3.06	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-GREEN, MODERATELY WEATHERED.
44.36	0.60	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
44.74	0.38	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
45.28	0.54	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
46.11	0.83	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
46.64	0.53	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, SLIGHTLY WEATHERED, STRONG ROCK.
47.13	0.49	100		100% SILTSTONE	GREY, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
48.08	0.95	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.90	1.82	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
50.15	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
50.21	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
50.82	0.61	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
50.90	0.08	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, WEAK ROCK.
51.42	0.52	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
51.50	0.08	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
54.19	2.69	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
56.31	2.12	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
58.17	1.86	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, STRONG ROCK.
58.75	0.58	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
59.00	0.25	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
59.26	0.26	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
61.51	2.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
61.66	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
63.01	1.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, COALY, BLACK, UNWEATHERED, STRONG ROCK.
65.81	2.80	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, STRONG ROCK.
67.70	1.89	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH CALCITE ON CLEAT, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG.
68.29	0.59	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
68.46	0.17	100		100% MUDSTONE	FOSSILIFERROUS, DARK GREY, MODERATELY WEAK ROCK.
68.87	0.41	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
70.40	1.53	100		100% SANDSTONE,FINE GRAINED	GRADING TO, CARBONACEOUS, LIGHT GREY, MODERATELY WEAK ROCK.
70.56	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.70	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
71.20	0.50	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH CALCITE ON FRACTURES, MODERATELY WEAK ROCK.
71.34	0.14	100		100% MUDSTONE	GREY, WEAK ROCK.
71.71	0.37	100		100% MUDSTONE	DARK GREY, WITH CALCITE ON FRACTURES, MODERATELY WEAK ROCK.
74.23	2.52	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
74.85	0.62	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, GREY, MODERATELY STRONG ROCK.
76.15	1.30	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
76.70	0.55	100		100% MUDSTONE	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
77.29	0.59	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
78.25	0.96	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
79.75	1.50	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
80.93	1.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
82.53	1.60	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, MODERATELY STRONG ROCK.
84.15	1.62	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK, WITH POOR SORTING.
85.18	1.03	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, STRONG ROCK.
85.64	0.46	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
89.36	3.72	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
89.82	0.46	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.
90.89	1.07	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, STRONG ROCK.
97.77	6.88	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
98.16	0.39	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
98.40	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH POOR SORTING.
98.83	0.43	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	BADLY BROKEN, DARK GREY. BADLY BROKEN, BLACK. MODERATELY WEAK ROCK.
98.92	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
99.04	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
99.09	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
99.31	0.22	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
99.53	0.22	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
99.62	0.09	100		100% MUDSTONE	PEBBLY, BROWN, WITH PEBBLY CHLORITE, MODERATELY WEAK ROCK.
100.33	0.71	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
100.70	0.37	100		100% SANDSTONE,FINE GRAINED	PEBBLY, PINK-GREY, MODERATELY STRONG ROCK, WITH FLAME/PULL STRUCTS.
103.86	3.16	100		100% SANDSTONE,FINE GRAINED	CREAM, WITH TRACES OF SULPHIDES, MODERATELY STRONG ROCK, WITH FLAME/PULL STRUCTS.
104.85	0.99	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREEN, MODERATELY STRONG ROCK.
104.96	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
107.22	2.26	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY WEAK ROCK, WITH BURROWING.
107.50	0.28	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, MODERATELY WEAK ROCK.
113.30	5.80	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
113.94	0.64	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	LIGHT GREY. GREY. STRONG ROCK, BEDS DIP 6 DEG.
114.39	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
115.15	0.76	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREEN, MODERATELY STRONG ROCK.
116.06	0.91	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
116.96	0.90	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, STRONG ROCK.
117.78	0.82	100		100% SANDSTONE,FINE GRAINED	BADLY BROKEN, PEBBLY, LIGHT GREY, MODERATELY STRONG ROCK.
118.14	0.36	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
119.77	1.63	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
120.35	0.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
122.98	2.63	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
129.02	6.04	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
129.21	0.19	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
129.28	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
129.43	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.56	1.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
131.63	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
133.80	2.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, STRONG ROCK.
134.47	0.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
134.68	0.21	100		100% COAL, INTERBANDED DULL AND BRIGHT	
134.74	0.06	100		100% MUDSTONE	DARK GREY, WEAK ROCK.
134.94	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
135.00	0.06	100		100% MUDSTONE	BROWN, VERY WEAK ROCK.
135.06	0.06	100		100% COAL, DULL	
135.29	0.23	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
135.39	0.10	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
135.42	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
135.49	0.07	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
136.56	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, CREAM, MODERATELY STRONG ROCK.
137.17	0.61	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY STRONG ROCK.
139.22	2.05	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
140.17	0.95	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
140.40	0.23	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
140.44	0.04	100		100% MUDSTONE	BROWN, WEAK ROCK.
140.49	0.05	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
140.60	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
140.68	0.08	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
140.78	0.10	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
140.85	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
140.88	0.03	100		100% CLAY	LIGHT BROWN, STIFF, RAPID SLAKING, NON STICKY.
141.02	0.14	100		100% COAL, HEAVY DULL	
141.05	0.03	100		100% MUDSTONE	GREY, WEAK ROCK.
141.07	0.02	100		100% SANDSTONE,FINE GRAINED	BROWN, MODERATELY STRONG ROCK.
141.24	0.17	100		100% COAL, HEAVY DULL	
141.28	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.78	1.50	100		100% SANDSTONE,FINE GRAINED	CREAM, MODERATELY STRONG ROCK.
143.00	0.22	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY STRONG ROCK.
143.19	0.19	100		100% COAL, HEAVY DULL	
143.22	0.03	100		100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
143.53	0.31	100		100% COAL, HEAVY DULL	DULL COAL, BANDS.
143.61	0.08	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, STRONG ROCK.
143.69	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
143.70	0.01	100		100% MUDSTONE	BROWN, WEAK ROCK.
143.75	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
143.79	0.04	100		100% MUDSTONE	COALY, FRAGMENTS, BROWN, MODERATELY WEAK ROCK.
143.87	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
143.97	0.10	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
144.01	0.04	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
144.16	0.15	100		100% COAL, DULL	
144.19	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY WEAK ROCK.
144.23	0.04	100		100% COAL, HEAVY DULL	
144.29	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
145.26	0.97	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
145.33	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
145.37	0.04	100		100% COAL, HEAVY DULL	
145.99	0.62	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT.
146.02	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
146.07	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
146.12	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
146.62	0.50	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
146.75	0.13	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
146.98	0.23	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
147.11	0.13	100		100% CLAY	CREAM, STIFF, SLOW SLAKING, NON STICKY.
147.56	0.45	100		100% SANDSTONE	MED.-FINE GRAINED, CREAM, MODERATELY STRONG ROCK.
147.67	0.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
147.93	0.26	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
148.03	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
148.07	0.04	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, STRONG ROCK.
148.14	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
148.18	0.04	100		100% COAL, BRIGHT	
148.34	0.16	100		100% COAL, DULL	
148.53	0.19	100		100% COAL, HEAVY DULL	
148.61	0.08	100		100% MUDSTONE	GREY-GREEN, WITH ABUNDANT CALCITE, MODERATELY WEAK ROCK.
148.70	0.09	100		100% COAL, DULL	
148.79	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
149.10	0.31	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BADLY BROKEN.
149.31	0.21	100		100% COAL, DULL	BADLY BROKEN.
153.13	3.82	100		100% SANDSTONE,FINE GRAINED	CREAM, MODERATELY STRONG ROCK.
153.37	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THINLY LAMINATED.
153.62	0.25	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, THINLY LAMINATED, LAMINATED, WITH TROUGH CROSS BEDDING.
158.78	5.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
159.32	0.54	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
159.54	0.22	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
159.58	0.04	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
159.84	0.26	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
159.88	0.04	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
160.02	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
160.83	0.81	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED.
161.01	0.18	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES.
161.02	0.01	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
161.05	0.03	100		100% COAL, DULL	
161.07	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
161.16	0.09	100		100% COAL, HEAVY DULL	
161.57	0.41	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, BANDS, LIGHT BROWN, MODERATELY STRONG ROCK, NON STICKY.
162.19	0.62	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BROWN, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
162.45	0.26	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
163.83	1.38	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
170.70	6.87	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
174.24	3.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
174.66	0.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
175.02	0.36	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
175.34	0.32	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, PEBBLY, LIGHT GREY, STRONG ROCK.
175.88	0.54	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, STRONG ROCK.
176.04	0.16	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	LIGHT GREY. PELLETAL, GREY. STRONG ROCK.
178.90	2.86	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
178.98	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
179.40	0.42	100		100% MUDSTONE	BROWN, WEAK ROCK.
179.48	0.08	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
179.78	0.30	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LAMINAE, BLACK, MODERATELY STRONG ROCK, WITH DISTURBED BEDDING.
179.97	0.19	100		100% COAL, HEAVY DULL	
180.19	0.22	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
180.22	0.03	100		100% MUDSTONE	GREY, WITH GRANULAR CALCITE, MODERATELY WEAK ROCK.
180.35	0.13	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
180.72	0.37	100		100% CARBONACEOUS SHALE	MUDSTONE, PEBBLY, BLACK, WEAK ROCK.
180.80	0.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, STRONG ROCK.
180.88	0.08	100		100% COAL, HEAVY DULL	
180.92	0.04	100		100% CARBONACEOUS SHALE	MUDSTONE, PEBBLY, BLACK, MODERATELY STRONG ROCK.
181.03	0.11	100		100% MUDSTONE	COALY, BANDS, GREY-BROWN, MODERATELY WEAK ROCK.
181.16	0.13	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
181.20	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
181.23	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
181.44	0.21	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT.
181.65	0.21	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
183.19	1.54	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED, WITH DISTURBED BEDDING.
183.97	0.78	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
184.24	0.27	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
184.51	0.27	100		100% COAL, DULL	MUDSTONE, PEBBLY.
184.79	0.28	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	WITH CALCITE ON CLEAT.
185.01	0.22	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
185.32	0.31	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
185.85	0.53	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	MUDSTONE, PEBBLY, BLACK. GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
185.96	0.11	100		100% COAL, HEAVY DULL	
186.05	0.09	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY.
186.16	0.11	100		100% COAL, HEAVY DULL	
186.25	0.09	100		100% SANDSTONE,MEDIUM GRAINED	DARK GREY, MODERATELY STRONG ROCK, WITH POOR SORTING.
186.29	0.04	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, STRONG ROCK, WITH POOR SORTING.
186.41	0.12	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
186.44	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
186.48	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK, WITH MUD PELLETS.
186.59	0.11	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
186.65	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, FIRM.
186.88	0.23	100		100% COAL, HEAVY DULL	
186.99	0.11	100		100% MUDSTONE	CREAM, SOFT.
187.06	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
188.25	1.19	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY WEAK ROCK.
189.40	1.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
197.44	8.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
197.76	0.32	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH FLAME/PULL STRUCTS.
198.50	0.74	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, PEBBLY, LIGHT GREY, STRONG ROCK.
206.11	7.61	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.34	0.23	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, PEBBLY, LIGHT GREY, STRONG ROCK.
206.55	0.21	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, LAMINATED.
208.20	1.65	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY.
208.71	0.51	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
208.74	0.03	100		100% SANDSTONE,FINE GRAINED	GREY.
210.31	1.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
210.37	0.06	100		100% PEBBLE CONGLOMERATE	MUDSTONE, PEBBLY, LIGHT GREY.
211.85	1.48	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
212.13	0.28	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
212.26	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
212.47	0.21	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
			TOP OF	DALMAYNE B : 240.63 M R.L.	
212.68	0.21	100		100% MUDSTONE	COALY, LENSES, GREY, WITH DISTURBED BEDDING.
212.81	0.13	100		100% COAL, HEAVY DULL	TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
213.02	0.21	100		100% MUDSTONE	GREY.
213.23	0.21	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK.
213.62	0.39	100		100% MUDSTONE	GREY.
213.69	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, MODERATELY STRONG ROCK.
213.93	0.24	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
214.03	0.10	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
214.11	0.08	100		100% CLAYSTONE	LIGHT BROWN, VERY WEAK ROCK.
214.14	0.03	100		100% SANDSTONE,FINE GRAINED	BROWN, VERY WEAK ROCK.
214.17	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH PLANT REMAINS.
214.19	0.02	100		100% CLAYSTONE	LIGHT BROWN.
214.29	0.10	100		100% COAL, HEAVY DULL	
214.70	0.41	100		100% MUDSTONE	PEBBLY, BROWN.
214.80	0.10	100		100% CLAYSTONE	LIGHT BROWN.
215.06	0.26	100		50% CLAYSTONE 50% CARBONACEOUS SHALE	LIGHT BROWN. BLACK.
215.22	0.16	100		100% CARBONACEOUS SHALE	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
215.27	0.05	100		100% MUDSTONE	LIGHT BROWN.
215.48	0.21	100		100% MUDSTONE	CARBONACEOUS, INTERCALATIONS, LIGHT BROWN, WITH DISTURBED BEDDING.
215.58	0.10	100		100% CARBONACEOUS SHALE	BLACK.
215.63	0.05	100		100% CLAYSTONE	CREAM, WITH ABUNDANT CALCITE.
215.84	0.21	100		100% CARBONACEOUS SHALE	CLAYSTONE, BANDS, BLACK.
215.89	0.05	100		100% CLAYSTONE	LIGHT BROWN.
216.28	0.39	100		100% CARBONACEOUS SHALE	ARGILLACEOUS, BANDS, BLACK.
216.60	0.32	100		100% CARBONACEOUS SHALE	BLACK.
216.85	0.25	100		100% MUDSTONE	CREAM, WITH GRANULAR CALCITE.
217.37	0.52	100		100% CARBONACEOUS MUDSTONE	BLACK.
217.95	0.58	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK.
218.27	0.32	100		100% TUFF	WHITE.
219.28	1.01	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, BLACK.
220.56	1.28	100		85% SANDSTONE 15% SANDSTONE,MEDIUM GRAINED	VERY FINE GRAINED, LIGHT GREY. LIGHT GREY.
221.19	0.63	100		100% MUDSTONE	GREY.
221.33	0.14	100		100% CLAY	CREAM, FIRM, RAPID SLAKING, VERY STICKY.
221.85	0.52	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
224.99	3.14	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH TROUGH CROSS BEDDING, LAMINATED.
227.97	2.98	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
228.10	0.13	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY WEAK ROCK.
228.24	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
228.25	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
228.39	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
228.42	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
228.77	0.35	100		100% COAL, DULL	
228.81	0.04	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
228.85	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
229.44	0.59	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, MODERATELY WEAK ROCK.
229.48	0.04	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
			BASE OF DALMAYNE B : THICKNESS= 17.01 M; SAMPLED THICKNESS= 0.00 M		
232.25	2.77	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
234.69	2.44	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	LIGHT GREY. GREY. MODERATELY STRONG ROCK, THICKLY LAMINATED.
237.77	3.08	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
245.90	8.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
251.20	5.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
251.63	0.43	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK.
254.53	2.90	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
255.77	1.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
			TOP OF DALMAYNE C : 197.33 M R.L.		
255.88	0.11	100		100% COAL, DULL	
255.98	0.10	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
256.10	0.12	100		100% COAL, DULL	
256.12	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
256.76	0.64	100		100% COAL, HEAVY DULL	BADLY BROKEN.
256.79	0.03	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
256.90	0.11	100		100% COAL, HEAVY DULL	BADLY BROKEN.
257.15	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
			BASE OF DALMAYNE C : THICKNESS= 1.38 M; SAMPLED THICKNESS= 0.00 M		
257.36	0.21	100		100% CLAY	CREAM, FIRM, SLOW SLAKING, VERY STICKY.
257.53	0.17	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
257.63	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
257.70	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
263.17	5.47	100		100% MUDSTONE	GREY, WITH PLANT REMAINS.
267.10	3.93	100		80% SANDSTONE 20% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. MODERATELY STRONG ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
267.30	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
270.58	3.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
270.91	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
271.16	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
271.43	0.27	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK.
272.93	1.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
273.76	0.83	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
276.55	2.79	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
276.83	0.28	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
279.56	2.73	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
281.25	1.69	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
281.91	0.66	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
293.88	11.97	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
294.20	0.32	100		100% PEBBLE CONGLOMERATE	GREY, STRONG ROCK.
298.20	4.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
305.14	6.94	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK.
305.54	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
				TOP OF : 147.56 M R.L.	
305.74	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, MODERATELY STRONG ROCK.
				BASE OF : THICKNESS= 0.20 M; SAMPLED THICKNESS= 0.00 M	
306.02	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
308.26	2.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
308.79	0.53	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
309.75	0.96	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.
310.38	0.63	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
313.39	3.01	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, VERY STRONG ROCK.
313.75	0.36	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
313.90	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
313.95	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
314.19	0.24	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
314.32	0.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
314.66	0.34	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
315.94	1.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
319.52	3.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
321.94	2.42	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
322.47	0.53	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE D UPPER : 130.63 M R.L.	
322.65	0.18	100		100% COAL, HEAVY DULL	
322.76	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
323.07	0.31	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON FRACTURES.
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.60 M; SAMPLED THICKNESS= 0.00 M	
323.86	0.79	100		100% MUDSTONE	BRIGHT COAL, BANDS, GREY, MODERATELY STRONG ROCK.
326.60	2.74	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
326.96	0.36	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY STRONG ROCK.
327.52	0.56	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
328.47	0.95	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK.
329.67	1.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
331.88	2.21	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
334.90	3.02	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
335.14	0.24	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
339.74	4.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
340.70	0.96	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
341.34	0.64	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
342.72	1.38	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK.
342.88	0.16	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
343.26	0.38	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK.
343.70	0.44	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
347.16	3.46	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE D LOWER : 105.94 M R.L.	
347.23	0.07	100	1	100% COAL, BRIGHT	
347.63	0.40	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
347.66	0.03	100	1	100% CLAY	PELLETAL, CREAM, STRONG ROCK, NON SLAKING, NON STICKY.
347.96	0.30	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	ARGILLACEOUS, LENSES.
348.55	0.59	100	1	100% COAL, DULL	WITH LENSES OF KAOLINITE, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG.
348.56	0.01	100	1	100% KAOLINITE	CRYSTALINE, PELLETAL, DARK GREY, NON SLAKING, NON STICKY.
348.57	0.01	100	1	100% COAL, BRIGHT	
349.19	0.62	100	1	100% COAL, DULL	
349.65	0.46	100	2	100% COAL, INTERBANDED DULL AND BRIGHT	
349.70	0.05	100	2	100% COAL, BRIGHT	
349.98	0.28	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
350.00	0.02	100	2	100% CLAY	LENSES.
350.08	0.08	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
350.11	0.03	100	2	100% CARBONACEOUS MUDSTONE	FRIABLE, BLACK.
350.19	0.08	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
350.65	0.46	100	2	100% COAL, DULL	
350.66	0.01	100	2	100% MUDSTONE	
350.72	0.06	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
350.74	0.02	100	2	100% COAL, BRIGHT	
350.89	0.15	100	2	100% COAL, BRIGHT	
350.91	0.02	100	2	100% MUDSTONE	
350.96	0.05	100	2	100% COAL, BRIGHT WITH FEW DULL BANDS	
351.00	0.04	100	2	100% COAL, HEAVY DULL	
351.16	0.16	100	2	100% COAL, BRIGHT WITH FEW DULL BANDS	
				BASE OF DALMAYNE D LOWER : THICKNESS= 4.00 M; SAMPLED THICKNESS= 4.00 M	
351.20	0.04	100		100% MUDSTONE	BRIGHT COAL, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
351.30	0.10	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
351.38	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
351.80	0.42	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY WEAK ROCK.
351.81	0.01	100		100% COAL, BRIGHT	PYRITIC, LENSES.
352.50	0.69	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, WITH CARBONACEOUS WISPS.
352.70	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
353.07	0.37	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
354.32	1.25	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, VERY STRONG ROCK.
354.66	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
355.88	1.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
356.17	0.29	100		100% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
356.24	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
356.37	0.13	100		100% COAL, DULL	
356.46	0.09	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
358.70	2.24	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. MODERATELY STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
359.49	0.79	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	COALY, STREAKS, LIGHT GREY. GREY. VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
361.04	1.55	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, LIGHT GREY, VERY STRONG ROCK.
361.18	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK.
361.70	0.52	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.
365.47	3.77	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
365.77	0.30	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
366.17	0.40	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
366.46	0.29	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
367.14	0.68	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
367.47	0.33	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
367.70	0.23	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
370.39	2.69	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
370.74	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
371.67	0.93	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
372.08	0.41	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
374.09	2.01	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
374.27	0.18	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
375.87	1.60	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
376.23	0.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
379.03	2.80	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
379.24	0.21	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, VERY STRONG ROCK.
379.78	0.54	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
380.73	0.95	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
380.86	0.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, VERY STRONG ROCK.
381.44	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
381.62	0.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
388.02	6.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
388.22	0.20	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, WITH LENSES OF PYRITE, MODERATELY STRONG ROCK.
388.62	0.40	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CARBONACEOUS, LIGHT GREY. GREY. VERY STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
388.70	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	212.47 - 229.48 M	17.01 M
DC	0.00 M	255.77 - 257.15 M	1.38 M
DC1	0.00 M	305.54 - 305.74 M	0.20 M
DDU	0.00 M	322.47 - 323.07 M	0.60 M
DDL	4.00 M	347.16 - 351.16 M	4.00 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	347.16 - 349.19 M	2.03 M
2	349.19 - 351.16 M	1.97 M

*** FRAME D15***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 29

HOLE TYPE	CORE
EASTING	599,018 M AM GRID
NORTHING	5,371,168 M AM GRID
ELEVATION	382.70 M
TOTAL DEPTH DRILLED	430.80 M
DRILLING STARTED	16/ 5/80
DRILLING TIME	
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
16.00	16.00	85		100% DOLERITE	SCREE, GREY-GREEN, HIGHLY WEATHERED, STRONG ROCK.
40.80	24.80	95		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, HIGHLY WEATHERED, VERY STRONG ROCK, WIDELY SPACED JOINTS, DISCONTINUITIES INFILLED WITH SOIL (>1.
41.67	0.87	100		100% DOLERITE	MED.-COARSE GRAINED, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
79.74	38.07	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.66	3.92	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
85.37	1.71	100		80% SANDSTONE,COARSE GRAINED 20% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PEBBLY, ROUNDED, GREY. UNWEATHERED, STRONG ROCK.
85.72	0.35	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.46	1.74	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
87.73	0.27	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
88.44	0.71	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
88.74	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
89.71	0.97	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
89.97	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
92.41	2.44	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, LAMINATED, WITH CARBONACEOUS WISPS.
94.72	2.31	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS. UNWEATHERED, STRONG ROCK.
94.95	0.23	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
95.26	0.31	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
95.38	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
95.59	0.21	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
95.87	0.28	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
95.93	0.06	100		100% MUDSTONE	ARENACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.00	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
96.07	0.07	100		100% CLAY	GREY-BROWN, UNWEATHERED, FIRM, RAPID SLAKING, MODERATELY STICKY.
96.13	0.06	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.15	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
96.52	0.37	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
96.79	0.27	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.87	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
96.99	0.12	100		100% SANDSTONE,FINE GRAINED	CALCITIC, CREAM, UNWEATHERED, MODERATELY STRONG ROCK.
97.08	0.09	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
97.16	0.08	100		100% SANDSTONE,FINE GRAINED	CALCITIC, WHITE, UNWEATHERED, STRONG ROCK.
97.28	0.12	100		100% COAL, DULL	
97.34	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
97.45	0.11	100		100% COAL, INTERBANDED DULL AND BRIGHT	
97.53	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, BROWN, UNWEATHERED, STRONG ROCK.
97.60	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
97.80	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.84	0.04	100		100% COAL, DULL	UNWEATHERED.
97.94	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
98.08	0.14	100		100% COAL, DULL	UNWEATHERED.
98.13	0.05	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
98.68	0.55	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED.
98.70	0.02	100		100% MUDSTONE	COALY, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
98.83	0.13	100		100% COAL, DULL	WITH CALCITE ON CLEAT, UNWEATHERED.
99.08	0.25	100		100% SANDSTONE	VERY FINE GRAINED, CALCITIC, BUFF, UNWEATHERED, MODERATELY STRONG ROCK.
99.19	0.11	100		100% COAL, DULL	UNWEATHERED.
99.55	0.36	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
99.61	0.06	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
99.78	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
99.85	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
99.90	0.05	100		100% COAL, DULL	UNWEATHERED.
99.91	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY UNWEATHERED, STRONG ROCK.
100.17	0.26	100		100% COAL, BRIGHT	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.27	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
100.35	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
100.45	0.10	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
100.47	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
100.50	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
100.72	0.22	100		100% COAL, BRIGHT	UNWEATHERED.
100.74	0.02	100		100% COAL, DULL	UNWEATHERED.
100.76	0.02	100		100% MUDSTONE	BRIGHT COAL, BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
100.80	0.04	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED.
100.85	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
101.14	0.29	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
101.17	0.03	100		100% COAL, DULL	UNWEATHERED.
101.21	0.04	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
101.25	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
101.29	0.04	100		100% MUDSTONE	BUFF, UNWEATHERED, MODERATELY WEAK ROCK.
101.34	0.05	100		100% COAL, DULL	UNWEATHERED.
101.40	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
101.56	0.16	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
102.94	1.38	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, WITH DETRITAL BIOTITE, UNWEATHERED, STRONG ROCK.
104.08	1.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
104.38	0.30	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
105.07	0.69	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BADLY BROKEN, UNWEATHERED.
105.24	0.17	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
105.95	0.71	100		100% SANDSTONE	MED.-FINE GRAINED, KAOLINITIC, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
106.00	0.05	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, STRONG ROCK.
106.21	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
106.28	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.45	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
106.71	0.26	100		100% COAL, BRIGHT	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.90	0.19	100		100% COAL, DULL	UNWEATHERED.
107.05	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, KAOLINITIC, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
107.16	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.69	0.53	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BADLY BROKEN, UNWEATHERED.
108.02	0.33	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
109.11	1.09	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
109.43	0.32	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
109.68	0.25	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
115.63	5.95	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
115.70	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, BROWN, UNWEATHERED, STRONG ROCK.
115.75	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
115.85	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
116.48	0.63	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
116.82	0.34	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
117.41	0.59	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
117.62	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
118.15	0.53	100		100% SANDSTONE,FINE GRAINED	KAOLINITIC, CALCITIC, BUFF, UNWEATHERED, MODERATELY WEAK ROCK.
118.18	0.03	100		100% CLAY	BUFF, UNWEATHERED, SOFT, VERY STICKY.
118.31	0.13	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
118.35	0.04	100		100% CLAY	CALCITIC, BUFF, UNWEATHERED, FIRM, VERY STICKY.
118.49	0.14	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
118.54	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
118.99	0.45	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.07	0.08	100		100% COAL, DULL	UNWEATHERED.
119.11	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.14	0.03	100		100% COAL, DULL	UNWEATHERED.
119.16	0.02	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, LIGHT GREEN, UNWEATHERED, MODERATELY STRONG ROCK.
119.29	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
119.68	0.39	100		100% SANDSTONE,MEDIUM GRAINED	KAOLINITIC, GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
119.96	0.28	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.01	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
120.35	0.34	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS, UNWEATHERED.
120.74	0.39	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
122.18	1.44	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
123.04	0.86	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
128.61	5.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
132.70	4.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
132.77	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
132.95	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
133.07	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
133.24	0.17	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
133.39	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
133.59	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
133.76	0.17	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
133.85	0.09	100		100% COAL, DULL	UNWEATHERED.
133.95	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, UNWEATHERED, MODERATELY STRONG ROCK.
134.08	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
134.31	0.23	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
134.46	0.15	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
134.63	0.17	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
134.71	0.08	100		100% COAL, BRIGHT	UNWEATHERED.
135.17	0.46	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
139.00	3.83	100		85% SANDSTONE 15% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
139.91	0.91	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
140.08	0.17	100		100% COAL, DULL	UNWEATHERED, WITH FLAME/PULL STRUCTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
140.16	0.08	100		100% SANDSTONE,MEDIUM GRAINED	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
140.24	0.08	100		100% COAL, DULL	UNWEATHERED.
140.39	0.15	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
140.62	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
140.77	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, MODERATELY STRONG ROCK.
140.92	0.15	100		100% COAL, HEAVY DULL	
141.28	0.36	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
141.85	0.57	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, LAMINATED.
142.14	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREEN, MODERATELY WEAK ROCK.
142.41	0.27	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
142.54	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
144.26	1.72	100		90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. MODERATELY WEAK ROCK, VERY THINLY BEDDED, LAMINATED.
150.80	6.54	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
151.74	0.94	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
151.80	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
152.32	0.52	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
152.52	0.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
153.27	0.75	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, LAMINATED, WITH DISTURBED BEDDING.
154.76	1.49	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
156.64	1.88	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
156.74	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
158.26	1.52	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
158.49	0.23	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, LAMINATED.
159.25	0.76	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
159.56	0.31	100		65% SANDSTONE,MEDIUM GRAINED 35% SANDSTONE,FINE GRAINED	LIGHT GREY. GREY. STRONG ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, WITH TROUGH CROSS BEDDING.
160.16	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
160.35	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH CALCITE ON FRACTURES, STRONG ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
161.50	1.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
161.70	0.20	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, BANDS, GREY, STRONG ROCK.
162.09	0.39	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT GREY. LENSES, GREY. STRONG ROCK.
162.29	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
162.54	0.25	100		85% SANDSTONE 15% SANDSTONE,MEDIUM GRAINED	VERY FINE GRAINED, GREY. BANDS, LIGHT GREY. MODERATELY STRONG ROCK.
163.27	0.73	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. GREY. STRONG ROCK, WITH CARBONACEOUS WISPS.
163.52	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
163.98	0.46	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. GREY. STRONG ROCK, VERY THINLY BEDDED, LAMINATED.
164.98	1.00	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
165.77	0.79	100		85% SANDSTONE,COARSE GRAINED 15% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PEBBLY, GREY. STRONG ROCK, WITH PEBBLE LINEATION.
				TOP OF DALMAYNE B : 216.93 M R.L.	
165.98	0.21	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	WITH CALCITE ON CLEAT.
166.16	0.18	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, MODERATELY WEAK ROCK.
166.20	0.04	100		100% COAL, BRIGHT	UNWEATHERED.
166.33	0.13	100		100% COAL, DULL	UNWEATHERED, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
166.41	0.08	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
166.45	0.04	100		100% COAL, DULL	UNWEATHERED.
166.48	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
166.71	0.23	100		100% COAL, DULL	UNWEATHERED.
166.86	0.15	100		100% MUDSTONE	KAOLINITIC, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
166.89	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
166.95	0.06	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
167.05	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
167.41	0.36	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
167.48	0.07	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
167.54	0.06	100		100% MUDSTONE	HEAVY DULL COAL, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
167.62	0.08	100		100% COAL, HEAVY DULL	UNWEATHERED.
167.64	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
167.77	0.13	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS, UNWEATHERED.
168.01	0.24	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.
168.78	0.77	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
168.85	0.07	100		100% COAL, HEAVY DULL	UNWEATHERED.
168.99	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
169.07	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK.
169.12	0.05	100		100% COAL, HEAVY DULL	UNWEATHERED.
169.17	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
169.28	0.11	100		100% COAL, HEAVY DULL	UNWEATHERED.
169.35	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
169.41	0.06	100		100% COAL, HEAVY DULL	UNWEATHERED.
169.50	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
169.61	0.11	100		100% COAL, HEAVY DULL	UNWEATHERED, WITH MUD PELLETS.
169.76	0.15	100		100% COAL, HEAVY DULL	UNWEATHERED.
169.80	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
169.85	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
169.88	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
170.12	0.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, UNWEATHERED, STRONG ROCK.
170.15	0.03	100		100% COAL, HEAVY DULL	UNWEATHERED.
170.37	0.22	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
170.41	0.04			100% COAL, HEAVY DULL	
170.44	0.03	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
170.59	0.15	100		100% COAL, HEAVY DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.63	0.04	100		100% SANDSTONE	VERY FINE GRAINED, BROWN, UNWEATHERED, STRONG ROCK.
170.74	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
170.75	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
170.82	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
170.89	0.07	100		50% MUDSTONE 50% COAL, DULL WITH FEW BRIGHT BANDS	BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
171.18	0.29	100		100% CLAYSTONE	KAOLINITIC, WAXY, GREY-GREEN, UNWEATHERED.
171.32	0.14	100		100% COAL, DULL	UNWEATHERED.
171.38	0.06	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, STRONG ROCK.
171.43	0.05	100		100% COAL, HEAVY DULL	UNWEATHERED, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
171.50	0.07	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, STRONG ROCK.
171.66	0.16	100		100% COAL, DULL	UNWEATHERED.
171.74	0.08	100		100% CLAYSTONE	KAOLINITIC, LIGHT GREEN, UNWEATHERED, WEAK ROCK.
171.77	0.03	100		100% COAL, HEAVY DULL	UNWEATHERED.
171.84	0.07	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
171.86	0.02	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES, UNWEATHERED.
171.89	0.03	100		100% CLAYSTONE	KAOLINITIC, LIGHT GREEN, UNWEATHERED, WEAK ROCK.
172.01	0.12	100		100% COAL, DULL	UNWEATHERED.
172.07	0.06	100		100% COAL, DULL	WITH CALCITE ON CLEAT, UNWEATHERED.
172.11	0.04	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
172.18	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, EXTREMELY SRONG ROCK.
172.25	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED.
172.29	0.04	100		100% MUDSTONE	BROWN, WITH ABUNDANT CALCITE, UNWEATHERED, EXTREMELY SRONG ROCK.
172.68	0.39	100		100% MUDSTONE	GREEN-BROWN, WITH GRANULAR CALCITE, UNWEATHERED, WEAK ROCK.
172.83	0.15	100		100% COAL, HEAVY DULL	UNWEATHERED.
172.84	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
173.01	0.17	100		100% COAL, DULL	UNWEATHERED.
173.06	0.05	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
173.08	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
173.19	0.11	100		100% COAL, DULL	UNWEATHERED.
173.70	0.51	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BLUE, UNWEATHERED, MODERATELY STRONG ROCK.
174.01	0.31	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
174.13	0.12	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
174.21	0.08	100		100% COAL, HEAVY DULL	UNWEATHERED.
174.28	0.07	100		100% MUDSTONE	ARENACEOUS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
174.40	0.12	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
174.41	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
174.44	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
174.49	0.05	100		100% COAL, DULL	MUDSTONE, LENSES, UNWEATHERED.
174.69	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, UNWEATHERED.
174.94	0.25	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BADLY BROKEN, UNWEATHERED.
174.98	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
175.10	0.12	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
175.15	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
175.32	0.17	100		100% COAL, DULL	UNWEATHERED.
175.36	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
175.42	0.06	100		100% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
175.59	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
175.60	0.01	100		100% CARBONACEOUS SHALE	UNWEATHERED.
175.72	0.12	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
175.80	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
175.84	0.04	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
176.10	0.26	100		100% COAL, DULL	UNWEATHERED.
176.19	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
176.20	0.01	100		100% COAL, BRIGHT	UNWEATHERED.

BASE OF DALMAYNE 8 : THICKNESS= 10.43 M; SAMPLED THICKNESS= 0.00 M

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
178.35	2.15	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
178.81	0.46	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
181.33	2.52	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
186.22	4.89	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
186.41	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
187.59	1.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
188.64	1.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
188.70	0.06	100		100% COAL, BRIGHT	WITH CALCITE ON CLEAT, UNWEATHERED.
189.03	0.33	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK.
192.35	3.32	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
192.97	0.62	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH GRANULAR CALCITE, UNWEATHERED, STRONG ROCK.
194.33	1.36	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
194.35	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
194.59	0.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
198.89	4.30	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
198.93	0.04	100		100% SANDSTONE,FINE GRAINED	COALY, TRACES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
198.98	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
199.10	0.12	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
			TOP OF DALMAYNE C : 183.60 M R.L.		
199.32	0.22	100		100% COAL, DULL	UNWEATHERED.
199.44	0.12	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
199.60	0.16	100		100% COAL, DULL	BADLY BROKEN, UNWEATHERED.
199.69	0.09	100		100% CLAYSTONE	KAOLINITIC, UNWEATHERED, WEAK ROCK.
200.00	0.31	100		100% COAL, DULL	MUDSTONE, TRACES, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
200.04	0.04	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
200.30	0.26	100		100% COAL, DULL	UNWEATHERED.
200.33	0.03	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
200.38	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
				BASE OF DALMAYNE C : THICKNESS= 1.28 M; SAMPLED THICKNESS= 0.00 M	
202.65	2.27	100		100% MUDSTONE	CARBONACEOUS, TRACES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
203.27	0.62	100		100% SANDSTONE	MED.-FINE GRAINED, UNWEATHERED, STRONG ROCK, LAMINATED.
206.60	3.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
207.45	0.85	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
209.36	1.91	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
211.21	1.85	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
211.49	0.28	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK, WITH PEBBLE LINEATION.
211.64	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
211.80	0.16	0		CORE LOSS	
211.90	0.10	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
212.04	0.14	100		100% SANDSTONE	MED.-FINE GRAINED, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
212.36	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
212.38	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
212.78	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
213.00	0.22	100		100% COAL, DULL	UNWEATHERED.
213.15	0.15	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
213.58	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
214.14	0.56	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
218.60	4.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
218.77	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
219.23	0.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
219.31	0.08	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
219.34	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
219.39	0.05	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
220.17	0.78	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
220.80	0.63	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
221.02	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
221.44	0.42	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, STRONG ROCK.
221.63	0.19	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
221.87	0.24	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
222.38	0.51	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
222.42	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
223.36	0.94	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
224.17	0.81	100		90% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 5% COAL, DULL	COALY, FRAGMENTS, LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
233.10	8.93	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
233.31	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
247.93	14.62	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
248.10	0.17	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
252.81	4.71	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
253.28	0.47	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
253.32	0.04	100		100% COAL, BRIGHT	UNWEATHERED.
254.62	1.30	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
258.99	4.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
259.16	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
259.19	0.03	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE D UPPER : 123.51 M R.L.	
259.24	0.05	100		100% COAL, DULL	UNWEATHERED.
259.53	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
259.54	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
259.59	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
259.60	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
259.62	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
259.66	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
259.76	0.10	100		100% MUDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, WITH DISTURBED BEDDING.
259.80	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
259.81	0.01	100		100% CLAY	KAOLINITIC, BROWN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY.
259.87	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
260.17	0.30	100		100% COAL, DULL	UNWEATHERED.
260.25	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
260.31	0.06	100		60% COAL, DULL 40% MUDSTONE	GREY. UNWEATHERED, WITH DISTURBED BEDDING.
				BASE OF DALMAYNE D UPPER : THICKNESS= 1.12 M; SAMPLED THICKNESS= 0.00 M	
261.46	1.15	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
263.60	2.14	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
263.70	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
266.56	2.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
267.90	1.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
272.45	4.55	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
273.36	0.91	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
273.59	0.23	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
274.84	1.25	100		90% SANDSTONE 5% COAL 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, PEBBLY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
275.75	0.91	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
276.81	1.06	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
276.91	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
277.11	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
277.89	0.78	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
278.10	0.21	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
278.59	0.49	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
278.74	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
279.38	0.64	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
279.57	0.19	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
279.90	0.33	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
279.97	0.07	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
280.03	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
				TOP OF DALMAYNE D LOWER : 102.67 M R.L.	
280.17	0.14	100	1	100% COAL, DULL	UNWEATHERED.
280.49	0.32	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
280.50	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
280.57	0.07	100	1	100% COAL, DULL	UNWEATHERED.
280.58	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
280.74	0.16	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
280.75	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
280.77	0.02	100	1	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
280.83	0.06	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
280.91	0.08	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON JOINTS, UNWEATHERED.
280.96	0.05	100	1	100% COAL, DULL	KAOLINITIC, PELLETAL, UNWEATHERED.
280.98	0.02	100	1	100% COAL, BRIGHT	UNWEATHERED.
281.18	0.20	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
281.19	0.01	100	1	100% MUDSTONE	UNWEATHERED.
281.26	0.07	100	1	100% COAL, DULL	UNWEATHERED.
281.37	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
281.38	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
281.39	0.01	100	1	100% COAL, DULL	UNWEATHERED.
281.42	0.03	100	1	100% TONSTEIN	BRIGHT COAL, STREAKS, DARK GREY, UNWEATHERED.
281.46	0.04	100	1	100% COAL, DULL	UNWEATHERED.
281.58	0.12	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
281.88	0.30	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
281.98	0.10	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
281.99	0.01	100	3	100% COAL, BRIGHT	UNWEATHERED.
282.00	0.01	100	3	100% COAL, DULL	UNWEATHERED.
282.03	0.03	100	3	100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
282.04	0.01	100	3	100% COAL, HEAVY DULL	UNWEATHERED.
282.12	0.08	100	3	100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
				BASE OF DALMAYNE D LOWER : THICKNESS= 2.09 M; SAMPLED THICKNESS= 2.09 M	
282.17	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
282.33	0.16	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	PELLETAL, WHITE. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
284.23	1.90	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
284.63	0.40	100		50% SILTSTONE 50% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
284.65	0.02	100	4	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
284.66	0.01	100	4	100% MUDSTONE	BRIGHT COAL, BANDS, GREY, UNWEATHERED.
284.71	0.05	100	4	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS, UNWEATHERED.
284.73	0.02	100	4	100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
284.89	0.16	100	4	100% COAL, DULL	UNWEATHERED.
284.93	0.04	100	4	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
285.11	0.18	100	4	100% COAL, DULL	UNWEATHERED.
285.13	0.02	100	4	100% TONSTEIN	HEAVY DULL COAL, TRACES, UNWEATHERED.
285.28	0.15	100	4	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, UNWEATHERED.
285.37	0.09	100	5	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
285.63	0.26	100	5	100% COAL, HEAVY DULL	UNWEATHERED.
285.80	0.17	100	5	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF DALMAYNE D LOWER : 96.90 M R.L.	
285.90	0.10	100	6	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, UNWEATHERED.
285.93	0.03	100	6	100% COAL, HEAVY DULL	UNWEATHERED.
286.01	0.08	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
286.21	0.20	100	6	100% COAL, DULL	UNWEATHERED.
286.26	0.05	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
286.29	0.03	100	6	100% TONSTEIN	UNWEATHERED.
286.35	0.06	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
286.41	0.06	100	6	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
286.43	0.02	100	6	100% COAL, DULL	UNWEATHERED.
286.44	0.01	100	6	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
286.49	0.05	100	6	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
286.50	0.01	100	6	100% TONSTEIN	UNWEATHERED.
286.80	0.30	100	6	100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
286.96	0.16	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
286.97	0.01	100	6	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
286.99	0.02	100	6	100% COAL, DULL	UNWEATHERED.
287.04	0.05	100	6	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
287.09	0.05	100	6	100% COAL, BRIGHT	UNWEATHERED.
287.11	0.02	100	6	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
287.19	0.08	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
287.21	0.02	100	6	100% COAL, BRIGHT	UNWEATHERED.
287.24	0.03	100	6	100% COAL, DULL	UNWEATHERED.
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.44 M; SAMPLED THICKNESS= 1.44 M	
287.28	0.04	100	7	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
287.43	0.15	100	7	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
287.45	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
287.63	0.18	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
287.70	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.04	0.34	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.12	0.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.24	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.26	0.02	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.52	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
288.57	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
289.61	1.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
290.11	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
290.98	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
291.27	0.29	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
291.84	0.57	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
291.87	0.03	100		100% S MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
291.93	0.06	100		100% , DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
291.98	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
292.01	0.03	100		100% COAL, DULL	UNWEATHERED.
292.16	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
292.24	0.08	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
292.29	0.05	100		100% COAL, DULL	COARSE GRAINED, BANDS, UNWEATHERED.
292.31	0.02	100		100% CLAY	UNWEATHERED.
292.47	0.16	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
292.77	0.30	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
293.40	0.63	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
294.02	0.62	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
295.33	1.31	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
295.41	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
295.88	0.47	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
297.51	1.63	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK, MEDIUM BEDDED.
297.87	0.36	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
303.60	5.73	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
304.97	1.37	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
305.06	0.09	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
305.18	0.12	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
307.06	1.83	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
307.86	0.80	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
308.20	0.34	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
310.99	2.79	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
317.87	6.88	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
319.97	2.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT NON PLANAR.
320.55	0.58	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING.
323.22	2.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
324.63	1.41	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
324.95	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
325.01	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
325.35	0.34	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
325.82	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
326.59	0.77	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES.
327.12	0.53	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
327.27	0.15	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
327.50	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
328.58	1.08	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
328.60	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
328.83	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
328.90	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
329.11	0.21	100		100% COAL, HEAVY DULL	UNWEATHERED.
329.16	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
329.33	0.17	100		100% COAL, HEAVY DULL	UNWEATHERED.
329.76	0.43	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
330.81	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
331.07	0.26	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
331.16	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH LENSES OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
331.17	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
331.27	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
331.98	0.71	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
332.27	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
332.28	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	UNWEATHERED.
332.31	0.03	100		100% MUDSTONE	LIGHT BROWN, WITH BANDS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
333.30	0.99	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
334.22	0.92	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
335.53	1.31	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED.
			TOP OF	DALMAYNE E2 : 47.17 M R.L.	
335.77	0.24	100		100% COAL, HEAVY DULL	UNWEATHERED.
336.37	0.60	100		100% COAL, DULL	UNWEATHERED.
336.39	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
336.41	0.02	100		100% COAL, HEAVY DULL	UNWEATHERED.
336.42	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
336.50	0.08	100		100% COAL, DULL	UNWEATHERED.
			BASE OF	DALMAYNE E2 : THICKNESS= 0.97 M; SAMPLED THICKNESS= 0.00 M	
337.10	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, GREY-BROWN, UNWEATHERED, STRONG ROCK.
337.34	0.24	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
337.44	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
337.83	0.39	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
340.87	3.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
341.60	0.73	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
341.63	0.03	100		100% COAL, DULL	UNWEATHERED.
342.46	0.83	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, STRONG ROCK, LAMINATED.
343.48	1.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH POOR SORTING.
344.05	0.57	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
344.06	0.01	100		100% CLAY	KAOLINITIC, DARK BROWN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY.
344.21	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
344.34	0.13	100		100% MUDSTONE	ARGILLACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
344.88	0.54	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
344.93	0.05	100		100% COAL, DULL	UNWEATHERED, TIGHT NON PLANAR, WITH SLICKENSIDES.
347.74	2.81	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
347.81	0.07	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
347.97	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
350.39	2.42	100		75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, BLACK. BLACK. UNWEATHERED, STRONG ROCK.
350.75	0.36	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
351.35	0.60	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
351.79	0.44	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
352.13	0.34	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
360.07	7.94	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
360.35	0.28	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
360.64	0.29	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
361.15	0.51	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
362.52	1.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
362.93	0.41	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
363.44	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
363.90	0.46	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE	LIGHT GREY. MED.-FINE GRAINED, CARBONACEOUS, BLACK. UNWEATHERED, STRONG ROCK, THICKLY LAMINATED.
364.18	0.28	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
365.49	1.31	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
366.42	0.93	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
366.65	0.23	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
366.71	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
366.73	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
367.06	0.33	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
367.29	0.23	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
367.66	0.37	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED, WITH DISTURBED BEDDING.
367.86	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
368.33	0.47	100		90% SANDSTONE 10% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, GREY. UNWEATHERED, STRONG ROCK, WITH TROUGH CROSS BEDDING.
368.97	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
369.11	0.14	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
369.15	0.04	100		100% SANDSTONE,FINE GRAINED	POORLY SORTED, DARK GREY, UNWEATHERED, STRONG ROCK.
369.44	0.29	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
369.91	0.47	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
370.01	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
370.80	0.79	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, GREY. LENSES, GREY. UNWEATHERED, MODERATELY STRONG ROCK.
372.13	1.33	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
372.41	0.28	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
372.65	0.24	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
372.66	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
373.16	0.50	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
373.22	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
373.25	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
373.28	0.03	100		100% MUDSTONE	COALY, TRACES, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
373.33	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
373.38	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
373.39	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
373.44	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
373.55	0.11	100		90% SANDSTONE 10% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, LENSES, GREY. UNWEATHERED, STRONG ROCK.
373.81	0.26	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
374.16	0.35	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
374.18	0.02	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
374.26	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
374.52	0.26	100		45% MUDSTONE 30% MUDSTONE 25% SANDSTONE	DARK GREY. DARK GREY. VERY FINE GRAINED, DARK BROWN. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
374.67	0.15	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
375.52	0.85	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
376.02	0.50	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
376.34	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
376.36	0.02	100		100% MUDSTONE	KAOLINITIC, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
376.41	0.05	100		100% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
376.52	0.11	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
376.80	0.28	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
377.02	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
377.20	0.18	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK.
379.19	1.99	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, DARK GREY. MEDIUM GRAINED, BANDS, LIGHT GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
379.57	0.38	100		100% SANDSTONE	VERY FINE GRAINED, CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
380.16	0.59	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
381.39	1.23	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK, THICKLY LAMINATED.
381.50	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
381.54	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
386.77	5.23	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH GRANULAR CALCITE, UNWEATHERED, STRONG ROCK.
387.06	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, UNWEATHERED, STRONG ROCK.
387.31	0.25	100		100% SANDSTONE,FINE GRAINED	GRADING TO, VERY FINE GRAINED, GREY, UNWEATHERED, STRONG RO[illegible].
387.47	0.16	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
387.69	0.22	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH DISTURBED BEDDING.
388.09	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
388.71	0.62	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, DARK GREY, UNWEATHERED, STRONG ROCK.
389.10	0.39	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
389.79	0.69	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
390.32	0.53	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
390.41	0.09	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
390.56	0.15	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
390.61	0.05	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
390.71	0.10	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
390.99	0.28	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
391.41	0.42	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
391.44	0.03	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, WITH ANGULAR QUARTZ, UNWEATHERED, STRONG ROCK.
391.53	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
391.62	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
391.66	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
391.70	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
391.77	0.07	100		100% COAL, DULL	UNWEATHERED.
391.80	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK.
392.06	0.26	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
392.10	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
392.16	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
392.25	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
392.52	0.27	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
392.60	0.08	100		100% MUDSTONE	COALY, LENSES, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
392.80	0.20	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
392.85	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
392.89	0.04	100		100% COAL, DULL	UNWEATHERED.
392.97	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
393.04	0.07	100		100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
393.20	0.16	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, POORLY SORTED, DARK GREY, UNWEATHERED, STRONG ROCK.
393.54	0.34	100		100% SANDSTONE	VERY COARSE GRAINED, POORLY SORTED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
393.67	0.13	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK.
393.69	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
393.85	0.16	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
393.93	0.08	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
393.97	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
394.00	0.03	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
394.31	0.31	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
394.54	0.23	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, BANDS, BUFF, UNWEATHERED, STRONG ROCK.
394.71	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
394.72	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
394.83	0.11	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
395.17	0.34	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
395.21	0.04	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
395.28	0.07	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
395.30	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
395.74	0.44	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
396.15	0.41	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
396.17	0.02	100		100% COAL, DULL	UNWEATHERED.
396.22	0.05	100		100% SANDSTONE,FINE GRAINED	DARK BROWN, UNWEATHERED, STRONG ROCK.
396.33	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
397.12	0.79	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
397.24	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
397.39	0.15	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, UNWEATHERED, STRONG ROCK.
397.68	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
398.18	0.50	100		100% SANDSTONE,COARSE GRAINED	CREAM, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
398.21	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING.
398.27	0.06	100		100% MUDSTONE	COALY, FRAGMENTS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
398.28	0.01	100		100% COAL, DULL	UNWEATHERED.
399.05	0.77	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
399.15	0.10	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS.
399.39	0.24	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
399.40	0.01	100		100% COAL, DULL	UNWEATHERED.
399.41	0.01	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
399.49	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
399.72	0.23	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
399.94	0.22	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, UNWEATHERED, STRONG ROCK.
400.13	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
400.51	0.38	100		100% SANDSTONE	MED.-COARSE GRAINED, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
400.57	0.06	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
400.67	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
400.80	0.13	0		CORE LOSS	
400.89	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
400.91	0.02	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
400.93	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
400.95	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
401.04	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
401.07	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
401.50	0.43	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
401.98	0.48	100		100% MUDSTONE	MEDIUM GRAINED, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
402.07	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
402.12	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
402.68	0.56	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MEDIUM GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
402.99	0.31	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
403.49	0.50	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
403.92	0.43	100		95% SANDSTONE 5% COAL	VERY FINE GRAINED, DARK GREY. LENSES. UNWEATHERED, MODERATELY STRONG ROCK.
404.02	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, POORLY SORTED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
404.70	0.68	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, THINLY BEDDED.
405.59	0.89	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
405.67	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
408.44	2.77	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
414.57	6.13	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
414.59	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
414.78	0.19	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, UNWEATHERED, STRONG ROCK.
415.21	0.43	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
415.80	0.59	100		100% SANDSTONE	MED.-FINE GRAINED, QUARTZOSE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
416.23	0.43	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, POORLY SORTED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
416.34	0.11	100		100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
416.47	0.13	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
419.67	3.20	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK.
420.28	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK.
421.18	0.90	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
421.48	0.30	100		100% SANDSTONE,FINE GRAINED	QUARTZOSE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
421.64	0.16	100		100% SANDSTONE	VERY FINE GRAINED, PEBBLY, GREY, UNWEATHERED, STRONG ROCK, WITH BURROWING.
430.80	9.16	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WITH PEBBLY QUARTZ, UNWEATHERED, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	165.77 - 176.20 M	10.43 M
DC	0.00 M	199.10 - 200.38 M	1.28 M
DDU	0.00 M	259.19 - 260.31 M	1.12 M
DDL	2.09 M	280.03 - 282.12 M	2.09 M
DDL	1.44 M	285.80 - 287.24 M	1.44 M
DE2	0.00 M	335.53 - 336.50 M	0.97 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	280.03 - 281.58 M	1.55 M
2	281.58 - 281.88 M	0.30 M
3	281.88 - 282.12 M	0.24 M
4	284.63 - 285.28 M	0.65 M
5	285.28 - 285.80 M	0.52 M
6	285.80 - 287.24 M	1.44 M
7	287.24 - 287.43 M	0.19 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 30

HOLE TYPE	CORE
EASTING	599,400 M AM GRID
NORTHING	5,387,600 M AM GRID
ELEVATION	505.00 M
TOTAL DEPTH DRILLED	274.50 M
DRILLING STARTED	25/ 6/80
DRILLING TIME	
CORE SIZE	61.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	173.75 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.MURPHY
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 30

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
30.33	30.33			100% DOLERITE	SCREE, RED-BROWN, WEATHERED TO SOIL, COMPACT.
31.55	1.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEATHERED, WEAK ROCK.
34.60	3.05	100		100% CARBONACEOUS MUDSTONE	BLACK, HIGHLY WEATHERED, VERY WEAK ROCK.
34.80	0.20	100		100% MUDSTONE	GREY, HIGHLY WEATHERED, STIFF.
37.14	2.34	100		100% CARBONACEOUS MUDSTONE	BLACK, WEATHERED TO SOIL, SOFT.
38.28	1.14	100		100% MUDSTONE	GREY, WEATHERED TO SOIL, SOFT.
40.60	2.32	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, HIGHLY WEATHERED, STIFF.
40.74	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK.
41.32	0.58	100		100% GRANULE CONGLOMERATE	DARK GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
41.40	0.08	100		100% MUDSTONE	GREY, WITH CALCITE ON FRACTURES, HIGHLY WEATHERED, STIFF.
41.72	0.32	0		CORE LOSS	
42.06	0.34	100		100% COAL	BLACK, HIGHLY WEATHERED, SOFT.
42.87	0.81	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, FIRM.
43.29	0.42	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
43.50	0.21	100		100% GRANULE CONGLOMERATE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
43.93	0.43	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, WITH CALCITE ON JOINTS, SLIGHTLY WEATHERED, WEAK ROCK.
45.20	1.27	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
45.88	0.68	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH BURROWING.
48.54	2.66	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
49.78	1.24	100		100% MUDSTONE	DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK.
55.87	6.09	100		100% SANDSTONE,FINE GRAINED	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
56.01	0.14	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
57.38	1.37	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
58.14	0.76	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, DARK BROWN, COMPLETELY WEATHERED, MODERATELY WEAK ROCK.
59.08	0.94	0		CORE LOSS	
59.50	0.42	100		100% MUDSTONE	BADLY BROKEN, GREY, HIGHLY WEATHERED, WEAK ROCK.
62.54	3.04	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.54	2.00	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
64.98	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
65.24	0.26	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
68.73	3.49	100		100% MUDSTONE	COALY, TRACES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
69.06	0.33	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
69.50	0.44	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
69.60	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.41	0.81	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
72.23	1.82	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. MEDIUM GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, LAMINATED.
74.48	2.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
75.29	0.81	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
75.90	0.61	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
76.75	0.85	100		100% MUDSTONE	PEBBLY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
78.50	1.75	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, MODERATELY WEAK ROCK.
79.37	0.87	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,FINE GRAINED	LIGHT GREY. CARBONACEOUS, BLACK. STRONG ROCK, THICKLY LAMINATED.
79.50	0.13	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK.
79.78	0.28	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, STRONG ROCK, LAMINATED, WITH PLANT REMAINS.
80.07	0.29	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK.
80.49	0.42	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
80.78	0.29	100		100% PEBBLE CONGLOMERATE	GREY, STRONG ROCK.
80.83	0.05	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, MODERATELY WEAK ROCK.
80.99	0.16	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
81.18	0.19	100		50% COAL, HEAVY DULL 50% MUDSTONE	LIGHT BROWN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
81.36	0.18	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
81.43	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
81.81	0.38	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
82.46	0.65	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
82.51	0.05	100		100% MUDSTONE	BUFF, WEAK ROCK.
83.68	1.17	100		100% MUDSTONE	FINE GRAINED SANDSTONE, TRACES, GREY, MODERATELY WEAK ROCK.
83.71	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
83.82	0.11	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
83.85	0.03	100		100% MUDSTONE	BUFF, WEAK ROCK.
84.30	0.45	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
84.35	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WEAK ROCK.
84.40	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
84.47	0.07	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
84.73	0.26	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
85.82	1.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
86.18	0.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
87.32	1.14	100		50% MUDSTONE 50% MUDSTONE	DARK GREY. FINE GRAINED SANDSTONE, LENSES, GREY. MODERATELY WEAK ROCK.
87.71	0.39	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, LIGHT GREY, STRONG ROCK.
87.79	0.08	100		100% MUDSTONE	GREY, FIRM.
88.77	0.98	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, STRONG ROCK.
88.90	0.13	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
89.09	0.19	100		100% SANDSTONE,FINE GRAINED	GREY, WITH CALCITE ON FRACTURES, MODERATELY STRONG ROCK.
89.17	0.08	100		100% MUDSTONE	KAOLINITIC, DARK GREY, WEAK ROCK.
89.32	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, MODERATELY WEAK ROCK.
89.36	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY WEAK ROCK.
89.38	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
89.47	0.09	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK, WITH BURROWING.
89.65	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
89.86	0.21	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
90.41	0.55	100		100% SANDSTONE,FINE GRAINED	DARK GREY, STRONG ROCK.
90.66	0.25	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
91.50	0.84	100		100% SANDSTONE,FINE GRAINED	DARK GREY, WITH CALCITE ON FRACTURES, STRONG ROCK.
92.56	1.06	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
92.91	0.35	100		100% SANDSTONE,FINE GRAINED	DARK GREY, STRONG ROCK.
93.02	0.11	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
94.65	1.63	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
94.76	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH SAND LINEATION.
94.87	0.11	100		100% GRANULE CONGLOMERATE	GREEN, STRONG ROCK.
94.88	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
94.90	0.02	100		100% MUDSTONE	GREY-GREEN, MODERATELY WEAK ROCK.
95.06	0.18	100		100% COAL, HEAVY DULL	MUDSTONE, TRACES.
95.28	0.22	100		100% MUDSTONE	KAOLINITIC, CREAM, WEAK ROCK.
95.32	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
95.33	0.01	100		100% MUDSTONE	KAOLINITIC, CREAM, WEAK ROCK.
95.43	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
95.44	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
95.54	0.10	100		100% COAL, DULL	
95.56	0.02	100		100% COAL, BRIGHT	
95.67	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES.
95.75	0.08	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, MODERATELY STRONG ROCK.
95.95	0.20	100		100% MUDSTONE	KAOLINITIC, CREAM, WEAK ROCK.
96.09	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES.
96.10	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
96.17	0.07	100		100% COAL, DULL	MUDSTONE, LENSES.
96.21	0.04	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
96.26	0.05	100		100% COAL, DULL	
96.30	0.04	100		100% COAL, BRIGHT	
96.35	0.05	100		100% COAL, DULL	BRIGHT COAL, LENSES.
96.37	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
96.45	0.08	100		100% COAL, DULL	
96.54	0.09	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.58	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
96.67	0.09	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
96.72	0.05	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
96.73	0.01	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
96.87	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES.
96.89	0.02	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK.
96.93	0.04	100		100% COAL, DULL	MUDSTONE, LENSES.
96.96	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, STRONG ROCK.
97.02	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, CREAM, STRONG ROCK, WITH CARBONACEOUS WISPS.
97.11	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MODERATELY WEAK ROCK.
99.33	2.22	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH BURROWING.
101.56	2.23	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
103.50	1.94	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
103.73	0.23	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
106.25	2.52	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, STRONG ROCK.
106.49	0.24	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
106.66	0.17	100		100% MUDSTONE	KAOLINITIC, LIGHT GREEN, WEAK ROCK.
106.88	0.22	100		100% SANDSTONE,FINE GRAINED	BADLY BROKEN, GREY, MODERATELY STRONG ROCK.
108.03	1.15	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
110.47	2.44	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED.
111.75	1.28	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THINLY BEDDED.
112.12	0.37	100		85% SANDSTONE,FINE GRAINED 15% SANDSTONE	BADLY BROKEN, GREY. MED.-FINE GRAINED, LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED.
112.14	0.02	100		100% COAL, HEAVY DULL	
112.15	0.01	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
112.23	0.08	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
112.50	0.27	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEAK ROCK.
112.78	0.28	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
113.03	0.25	100		80% COAL, DULL WITH FEW BRIGHT BANDS 20% MUDSTONE	BADLY BROKEN. LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
113.10	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
113.26	0.16	100		100% COAL, DULL	BADLY BROKEN.
113.42	0.16	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
113.75	0.33	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
113.91	0.16	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
114.46	0.55	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
114.51	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
114.54	0.03	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
114.82	0.28	100		100% COAL, DULL	WITH GRANULAR CALCITE.
114.93	0.11	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
115.09	0.16	100		100% COAL, DULL	MUDSTONE, LENSES.
115.35	0.26	100		100% COAL, DULL	
115.37	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
115.47	0.10	100		80% COAL, DULL 20% MUDSTONE	PEBBLY, LIGHT GREY.
115.50	0.03	100		100% COAL, DULL	
115.77	0.27	100		100% MUDSTONE	PEBBLY, DARK GREY, MODERATELY WEAK ROCK.
116.10	0.33	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
116.26	0.16	100		90% MUDSTONE 10% SAND	GREY. GRANULAR. WEAK ROCK.
116.42	0.16	100		80% COAL, DULL 20% MUDSTONE	PEBBLY, LIGHT GREY.
116.44	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
116.63	0.19	100		100% COAL, DULL	
116.67	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
116.80	0.13	100		100% COAL, DULL	MUDSTONE, LENSES, MODERATELY WEAK ROCK.
116.85	0.05	100		100% CARBONACEOUS MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY.
116.91	0.06	100		100% COAL, DULL	MUDSTONE, BANDS.
116.95	0.04	100		100% COAL, BRIGHT WITH FEW DULL BANDS	WITH CALCITE ON CLEAT.
117.02	0.07	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
117.21	0.19	100		100% COAL, DULL	WITH CALCITE ON CLEAT.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.29	0.08	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
117.75	0.46	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN.
118.40	0.65	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
118.74	0.34	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED.
118.86	0.12	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
119.08	0.22	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
119.38	0.30	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
119.44	0.06	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
120.02	0.58	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, LIGHT GREY. COALY, TRACES, GREY. STRONG ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
122.91	2.89	100		100% SANDSTONE,MEDIUM GRAINED	BUFF, MODERATELY WEAK ROCK.
123.23	0.32	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS.
125.47	2.24	100		100% SANDSTONE	VERY FINE GRAINED, CREAM, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
126.76	1.29	100		100% SANDSTONE.	MED.-FINE GRAINED, CREAM, STRONG ROCK, WITH CARBONACEOUS WISPS.
128.12	1.36	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, VERY THINLY BEDDED.
128.30	0.18	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, STRONG ROCK.
130.32	2.02	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK, VERY THINLY BEDDED.
131.49	1.17	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED, WITH DISTURBED BEDDING.
132.74	1.25	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
133.01	0.27	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
134.39	1.38	100		60% SANDSTONE 40% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GREY. LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED.
140.67	6.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
140.95	0.28	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	LIGHT GREY. LIGHT GREY. STRONG ROCK, THICKLY LAMINATED.
141.12	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
141.31	0.19	100		100% COBBLE CONGLOMERATE	GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
141.56	0.25	100		100% SANDSTONE,MEDIUM GRAINED	DARK GREY, STRONG ROCK.
142.10	0.54	100		100% SANDSTONE	VERY FINE GRAINED, CREAM, MODERATELY STRONG ROCK.
142.36	0.26	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
144.65	2.29	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
144.73	0.08	100		100% MUDSTONE	CALCITIC, LIGHT GREY, MODERATELY WEAK ROCK.
144.76	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
144.81	0.05	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
144.92	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
147.63	2.71	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, BANDS, LIGHT GREY, STRONG ROCK.
147.73	0.10	100		100% MUDSTONE	LIGHT GREY, VERY WEAK ROCK.
147.84	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
147.89	0.05	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
148.05	0.16	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
148.31	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH GRANULAR QUARTZ AND GRANULAR FELDSPAR, WEAK ROCK.
149.44	1.13	100		100% SANDSTONE,FINE GRAINED	PEBBLY, GREY-BROWN, MODERATELY STRONG ROCK.
149.65	0.21	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
149.97	0.32	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.
150.04	0.07	100		100% COAL, HEAVY DULL	
150.07	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
150.31	0.24	100		100% COAL, HEAVY DULL	
150.52	0.21	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
150.54	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
150.60	0.06	100		100% MUDSTONE	LIGHT BROWN.
151.03	0.43	100		100% COAL, DULL	
151.15	0.12	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, MODERATELY WEAK ROCK.
151.18	0.03	100		90% COAL, DULL 10% MUDSTONE	PEBBLY, LIGHT BROWN.
151.22	0.04	100		100% MUDSTONE	PEBBLY, LIGHT BROWN, MODERATELY WEAK ROCK.
151.34	0.12	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
151.50	0.16	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	WITH CALCITE ON CLEAT.
151.53	0.03	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, MODERATELY WEAK ROCK.
151.64	0.11	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
151.74	0.10	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
151.84	0.10	100		100% MUDSTONE	COALY, BANDS, DARK GREY, MODERATELY WEAK ROCK.
151.89	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, STRONG ROCK.
151.94	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
152.13	0.19	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, MODERATELY WEAK ROCK.
152.21	0.08	100		100% COAL, DULL	MUDSTONE, LENSES.
154.33	2.12	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, BANDS, LIGHT GREY, STRONG ROCK.
154.37	0.04	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
155.95	1.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY STRONG ROCK.
156.24	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
157.50	1.26	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
157.62	0.12	100		100% MUDSTONE	BRECCIATED, LIGHT GREY, MODERATELY WEAK ROCK.
158.69	1.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
158.99	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
160.71	1.72	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, LIGHT GREY, STRONG ROCK.
161.37	0.66	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
166.22	4.85	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
166.31	0.09	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. FRAGMENTS, GREY. STRONG ROCK.
170.10	3.79	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
170.49	0.39	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
170.58	0.09	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	ARENACEOUS, BANDS, BLACK. PEBBLY, BROWN. MODERATELY WEAK ROCK.
170.70	0.12	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, MODERATELY WEAK ROCK.
170.76	0.06	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
170.83	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
170.87	0.04	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.91	0.04	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
171.02	0.11	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
171.10	0.08	100		100% MUDSTONE	PEBBLY, BANDS, DARK GREY, MODERATELY WEAK ROCK.
171.48	0.38	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN.
171.68	0.20	0		CORE LOSS	
171.78	0.10	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
173.17	1.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
173.19	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
173.25	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
173.31	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
173.37	0.06	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
173.50	0.13	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
173.59	0.09	100		100% SANDSTONE,MEDIUM GRAINED	KAOLINITIC, LIGHT GREY, WEAK ROCK.
173.78	0.19	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, LAMINATED.
174.14	0.36	100		90% SANDSTONE 10% SANDSTONE	VERY FINE GRAINED, GREY. MED.-FINE GRAINED, LIGHT GREY. MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH DISTURBED BEDDING.
174.75	0.61	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, TRACES, LIGHT GREY, STRONG ROCK.
174.86	0.11	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, STRONG ROCK.
174.91	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
175.51	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, STRONG ROCK.
175.56	0.05	100		100% SANDSTONE	MED.-FINE GRAINED, DARK GREY, STRONG ROCK.
175.79	0.23	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
175.85	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
176.30	0.45	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
176.38	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
176.50	0.12	100		100% SANDSTONE,FINE GRAINED	DARK GREY, STRONG ROCK.
176.59	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
176.84	0.25	100		100% MUDSTONE	GREY-BROWN, MODERATELY WEAK ROCK.
177.03	0.19	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.04	0.01	100		100% SANDSTONE	VERY FINE GRAINED, CREAM, MODERATELY STRONG ROCK.
177.13	0.09	100		100% COAL, DULL	
177.21	0.08	100		95% SANDSTONE 5% MUDSTONE	VERY FINE GRAINED, DARK GREY. PEBBLY, LIGHT BROWN. MODERATELY WEAK ROCK.
177.25	0.04	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
177.42	0.17	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
177.43	0.01	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
177.50	0.07	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES.
177.52	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
177.80	0.28	100		100% COAL, DULL	
177.81	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
177.83	0.02	100		100% COAL, DULL	
177.86	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN.
177.95	0.09	100		100% COAL, DULL	MUDSTONE, BANDS.
178.13	0.18	100		50% COAL, DULL 50% MUDSTONE	BROWN. THICKLY LAMINATED, WITH CONVOLUTED BEDDING.
178.28	0.15	100		100% COAL, HEAVY DULL	
178.35	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
178.40	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
178.51	0.11	100		100% COAL, DULL	
178.52	0.01	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
178.53	0.01	100		100% COAL, DULL	
178.57	0.04	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
178.60	0.03	100		100% COAL, DULL	WITH CALCITE ON FRACTURES.
178.64	0.04	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK.
178.69	0.05	100		100% COAL, DULL	
178.72	0.03	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
178.82	0.10	100		100% COAL, DULL	
178.85	0.03	100		100% MUDSTONE	LIGHT GREEN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
178.87	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
178.98	0.11	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
179.04	0.06	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
179.10	0.06	100		100% COAL, DULL	MUDSTONE, LENSES.
179.14	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
179.33	0.19	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
179.39	0.06	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
179.55	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
179.56	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
179.58	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
179.68	0.10	100		100% MUDSTONE	BUFF, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
179.71	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
179.79	0.08	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
179.83	0.04	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, MODERATELY WEAK ROCK.
179.88	0.05	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
180.04	0.16	100		100% COAL, DULL	
180.05	0.01	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
180.20	0.15	100		100% COAL, DULL	
180.36	0.16	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
180.48	0.12	100		100% COAL, DULL	
180.52	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
180.53	0.01	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
180.62	0.09	100		100% COAL, DULL	
180.86	0.24	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT GREY, WEAK ROCK, WITH PLANT REMAINS.
180.93	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
181.01	0.08	100		100% COAL, DULL	
181.20	0.19	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
181.30	0.10	100		100% COAL, DULL	
181.34	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
181.37	0.03	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
181.40	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
181.51	0.11	100		100% COAL, HEAVY DULL	MUDSTONE, LENSES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
181.55	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
181.61	0.06	100		100% COAL, HEAVY DULL	
181.62	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
181.65	0.03	100		100% COAL, DULL	
181.70	0.05	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
181.80	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
181.85	0.05	100		100% MUDSTONE	KAOLINITIC, LIGHT GREY, WEAK ROCK.
181.97	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
182.00	0.03	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
182.04	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
182.08	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
182.80	0.72	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
182.87	0.07	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
183.32	0.45	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
183.48	0.16	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
183.57	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
186.16	2.59	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, LENSES, LIGHT GREY, STRONG ROCK, LAMINATED.
187.15	0.99	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
188.75	1.60	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE	GREY. MED.-FINE GRAINED, LIGHT GREY. STRONG ROCK, THICKLY LAMINATED.
190.82	2.07	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
194.74	3.92	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
194.81	0.07	100		100% COAL, DULL	
194.86	0.05	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
195.21	0.35	100		100% COAL, DULL	MUDSTONE, BANDS.
195.47	0.26	100		100% MUDSTONE	COALY, BANDS, BROWN, MODERATELY WEAK ROCK.
195.53	0.06	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
195.59	0.06	100		100% COAL, DULL	
195.63	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.70	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
195.74	0.04	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
195.85	0.11	100		100% COAL, DULL	
196.06	0.21	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
196.13	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
196.23	0.10	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
196.32	0.09	100		100% COAL, DULL	
197.11	0.79	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
197.21	0.10	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
197.90	0.69	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
198.16	0.26	100		100% COAL, DULL	
199.46	1.30	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
199.60	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, MODERATELY STRONG ROCK.
199.74	0.14	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, MODERATELY STRONG ROCK.
199.88	0.14	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
200.11	0.23	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
200.27	0.16	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
200.35	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
200.63	0.28	100		100% COAL, HEAVY DULL	ARENACEOUS, LENSES.
200.70	0.07	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, LIGHT GREY, STRONG ROCK.
200.90	0.20	100		50% CARBONACEOUS MUDSTONE 40% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	BLACK. LENSES, LIGHT GREY. BANDS, LIGHT GREY. MODERATELY WEAK ROCK.
210.02	9.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
212.18	2.16	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
212.65	0.47	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
212.70	0.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
212.86	0.16	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
214.00	1.14	0		CORE LOSS	
214.16	0.16	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
214.84	0.68	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
215.03	0.19	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT BROWN, VERY STRONG ROCK.
215.16	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
215.83	0.67	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK.
215.97	0.14	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, WITH DISTURBED BEDDING, WITH BURROWING.
217.03	1.06	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
217.23	0.20	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT BROWN, STRONG ROCK.
219.53	2.30	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
221.48	1.95	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
222.44	0.96	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
225.67	3.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
225.81	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
228.11	2.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
228.61	0.50	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
238.92	10.31	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
239.29	0.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
239.34	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
257.19	17.85	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
257.80	0.61	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, VERY STRONG ROCK.
257.94	0.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK.
258.81	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.
258.91	0.10	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
259.21	0.30	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
259.28	0.07	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
259.44	0.16	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY STRONG ROCK.
259.48	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY STRONG ROCK.
260.11	0.63	100		90% MUDSTONE 10% SILTSTONE	COALY, STREAKS, GREY. DARK GREY. MODERATELY STRONG ROCK, WITH PLANT REMAINS.
260.14	0.03	100		100% CLAY	DARK GREY, VERY WEAK ROCK, VERY STICKY.
260.45	0.31	100		100% COAL, DULL	
260.50	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
260.56	0.06	100		100% COAL, DULL	
260.61	0.05	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
260.72	0.11	100		100% COAL, DULL	
261.06	0.34	100		100% MUDSTONE	GREY, WEAK ROCK, VERY STICKY.
261.39	0.33	100		100% COAL, DULL	
262.50	1.11	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, STRONG ROCK.
262.60	0.10	100		100% SILTSTONE	GREY, STRONG ROCK.
262.90	0.30	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	FINE GRAINED SANDSTONE, STREAKS, BLACK. SILTSTONE, STREAKS, LIGHT GREY. VERY STRONG ROCK.
262.95	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
263.04	0.11	100		100% COAL, DULL	
263.92	0.88	100		100% MUDSTONE	GREY, STRONG ROCK, WITH PLANT REMAINS.
264.06	0.14	100		100% CARBONACEOUS MUDSTONE	DARK GREY, VERY WIDELY SPACED JOINTS.
				TOP OF DALMAYNE D : 240.94 M R.L.	
264.07	0.01		1	100% COAL, DULL	
264.08	0.01		1	100% TONSTEIN	
264.27	0.19		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
264.44	0.17		1	100% COAL, DULL	
264.61	0.17		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
264.67	0.06		1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
264.93	0.26		1	100% COAL, DULL	
264.97	0.04		1	100% COAL, INTERBANDED DULL AND BRIGHT	
265.31	0.34		1	100% COAL, HEAVY DULL	
265.37	0.06		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
265.41	0.04		1	100% COAL, DULL	
265.45	0.04		1	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, WITH PELLETS OF KAOLINITE.
265.53	0.08		1	100% COAL, DULL	
265.54	0.01		1	100% CARBONACEOUS MUDSTONE	BLACK.
265.56	0.02		1	100% CLAY	NON SLAKING, NON STICKY.
265.57	0.01		1	100% CARBONACEOUS MUDSTONE	BLACK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
265.67	0.10		1	100% COAL, DULL	
265.72	0.05		1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
265.76	0.04		1	100% TONSTEIN	
265.96	0.20		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.01	0.05		1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
266.08	0.07		1	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.17	0.09		1	100% COAL, DULL	
266.25	0.08	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.39	0.14	100	1	100% COAL, DULL	
266.46	0.07	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
266.58	0.12	100	1	100% COAL, DULL	
266.64	0.06	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
266.72	0.08	100	1	100% COAL, INTERBANDED DULL AND BRIGHT	
266.75	0.03	100	1	100% COAL, HEAVY DULL	
266.79	0.04	100	1	100% COAL, DULL	
266.86	0.07	100	2	100% CARBONACEOUS MUDSTONE	BLACK.
267.05	0.19	100	2	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
267.07	0.02	100	2	100% CARBONACEOUS MUDSTONE	
267.35	0.28	100	2	100% COAL, DULL	
267.39	0.04	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	
267.42	0.03	100	2	100% TONSTEIN	
267.45	0.03	100	2	100% COAL, INTERBANDED DULL AND BRIGHT	
267.67	0.22	100	3	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
267.77	0.10	100	3	100% COAL, INTERBANDED DULL AND BRIGHT	
267.90	0.13	100	3	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY WEAK ROCK.
268.10	0.20	100	3	100% MUDSTONE	GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
268.30	0.20	100	4	100% COAL, DULL	MUDSTONE, FRAGMENTS, WITH CALCITE ON FRACTURES, WITH MUD PELLETS.
268.50	0.20	100	4	100% COAL, DULL	BADLY BROKEN.
269.32	0.82	100	4	100% COAL, DULL	BRIGHT COAL, BANDS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
			BASE OF DALMAYNE D : THICKNESS= 5.26 M; SAMPLED THICKNESS= 5.26 M		
269.68	0.36	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY-BROWN, SLOW SLAKING.
271.48	1.80	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, STRONG ROCK, WITH PLANT REMAINS.
274.50	3.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DD	5.26 M	264.06 - 269.32 M	5.26 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	264.06 - 266.79 M	2.73 M
2	266.79 - 267.45 M	0.66 M
3	267.45 - 268.10 M	0.65 M
4	268.10 - 269.32 M	1.22 M

*** FRAME J01***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 32

HOLE TYPE	CORE
EASTING	598,900 M AM GRID
NORTHING	5,389,800 M AM GRID
ELEVATION	400.00 M
TOTAL DEPTH DRILLED	277.40 M
DRILLING STARTED	06/07/80
DRILLING TIME	
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
9.98	9.98	0		CORE LOSS	
				*** CORE DESCRIPTION ***	
10.06	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, COMPLETELY WEATHERED, MODERATELY WEAK ROCK.
10.13	0.07	100		100% MUDSTONE	DARK GREY, COMPLETELY WEATHERED, STRONG ROCK.
10.23	0.10	100		100% SANDSTONE,FINE GRAINED	DARK GREY, COMPLETELY WEATHERED, VERY STRONG ROCK.
10.26	0.03	100		100% MUDSTONE	BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
10.32	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, HIGHLY WEATHERED, WEAK ROCK.
10.33	0.01	100		100% MUDSTONE	BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK.
10.36	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
10.42	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS.
10.46	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
10.51	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
10.70	0.19	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, VERY WEAK ROCK.
10.95	0.25	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, MODERATELY WEATHERED, WEAK ROCK.
11.04	0.09	100		100% CARBONACEOUS MUDSTONE	GRADING TO, MUDSTONE, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
11.58	0.54	100		100% MUDSTONE	GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
11.73	0.15	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
13.08	1.35	100		100% MUDSTONE	BUFF, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
14.40	1.32	100		100% SANDSTONE,FINE GRAINED	CREAM, MODERATELY WEATHERED, MODERATELY STRONG ROCK.
15.00	0.60	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
15.48	0.48	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
15.63	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, YELLOW-GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
15.72	0.09	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
15.98	0.26	100		100% SANDSTONE	MED.-FINE GRAINED, YELLOW-GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
16.14	0.16	100		100% SANDSTONE,FINE GRAINED	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
16.26	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, YELLOW-GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK.
16.36	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
16.93	0.57	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
17.04	0.11	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
21.99	4.95	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE	GREY. MED.-FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK.
26.11	4.12	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-GREY, SLIGHTLY WEATHERED, STRONG ROCK.
26.80	0.69	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PEBBLY, GREY. UNWEATHERED, STRONG ROCK.
28.85	2.05	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
29.22	0.37	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
31.70	2.48	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
32.16	0.46	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
32.54	0.38	100		100% MUDSTONE	DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK.
32.56	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, WEAK ROCK.
32.82	0.26	100		100% MUDSTONE	BLACK, SLIGHTLY WEATHERED, WEAK ROCK.
33.58	0.76	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
33.72	0.14	100		100% MUDSTONE	LIGHT BROWN, SLIGHTLY WEATHERED, WEAK ROCK.
33.83	0.11	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
33.94	0.11	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
34.02	0.08	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED.
34.46	0.44	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK.
34.62	0.16	100		100% COAL, DULL	UNWEATHERED.
34.63	0.01	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
34.74	0.11	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
35.03	0.29	100		100% MUDSTONE	KAOLINITIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
35.21	0.18	100		100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.26	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
35.53	0.27	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
35.67	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
35.79	0.12	100		100% COAL, DULL	
35.80	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
35.90	0.10	100		100% COAL, DULL	MUDSTONE, BANDS.
36.05	0.15	100		100% COAL, DULL	
36.14	0.09	100		100% MUDSTONE	LIGHT BROWN.
36.16	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
36.28	0.12	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
36.34	0.06	100		100% COAL, DULL	
36.37	0.03	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT BROWN, MODERATELY STRONG ROCK.
36.39	0.02	100		100% TONSTEIN	BLACK, MODERATELY STRONG ROCK.
36.51	0.12	100		100% MUDSTONE	COALY, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
36.70	0.19	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
36.84	0.14	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
36.99	0.15	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
37.12	0.13	100		100% COAL, DULL	
37.36	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
39.98	2.62	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
40.20	0.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
40.25	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
41.58	1.33	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH DISTURBED BEDDING.
42.85	1.27	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
43.15	0.30	100		100% MUDSTONE	YELLOW-GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
43.35	0.20	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, PEBBLY, YELLOW-GREY, SLIGHTLY WEATHERED, STRONG ROCK.
46.11	2.76	100		100% SANDSTONE	MED.-FINE GRAINED, YELLOW-GREY, SLIGHTLY WEATHERED, STRONG ROCK.
48.06	1.95	100		100% SANDSTONE	MED.-COARSE GRAINED, YELLOW-GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.71	0.65	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-GREY, SLIGHTLY WEATHERED, STRONG ROCK.
50.49	1.78	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
51.21	0.72	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK.
53.70	2.49	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
53.80	0.10	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK.
59.10	5.30	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS. STRONG ROCK, WITH CARBONACEOUS WISPS.
59.42	0.32	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
59.45	0.03	100		100% CLAYSTONE	CREAM, WEAK ROCK.
59.48	0.03	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, MODERATELY WEAK ROCK.
59.66	0.18	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREEN, MODERATELY WEAK ROCK.
59.67	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
59.75	0.08	100		100% MUDSTONE	LIGHT GREEN, WEAK ROCK.
60.00	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
60.16	0.16	100		100% MUDSTONE	KAOLINITIC, LIGHT BROWN, WEAK ROCK.
60.24	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
60.31	0.07	100		100% MUDSTONE	KAOLINITIC, LIGHT BROWN, VERY WEAK ROCK.
60.67	0.36	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
60.86	0.19	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
61.01	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
61.12	0.11	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
61.32	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, MODERATELY WEAK ROCK.
61.92	0.60	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
62.35	0.43	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
62.44	0.09	100		100% COAL, HEAVY DULL	
62.78	0.34	100		100% MUDSTONE	COALY, BANDS, DARK BROWN, MODERATELY WEAK ROCK.
62.85	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
62.88	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
63.00	0.12	100		100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.04	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.13	0.09	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
63.26	0.13	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.31	0.05	100		100% COAL, DULL	
63.48	0.17	100		100% MUDSTONE	CARBONACEOUS, LENSES, LIGHT BROWN, MODERATELY WEAK ROCK.
63.54	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
63.87	0.33	100		100% MUDSTONE	BUFF, WEAK ROCK.
63.92	0.05	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
63.96	0.04	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
64.10	0.14	100		100% COAL, HEAVY DULL	
64.70	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, BROWN, MODERATELY WEAK ROCK.
64.80	0.10	100		100% COAL, DULL	MUDSTONE, LENSES.
64.81	0.01	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, WEAK ROCK.
64.86	0.05	100		100% COAL, DULL	
64.88	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
64.90	0.02	100		100% COAL, DULL	
64.96	0.06	100		100% COAL, DULL	
65.00	0.04	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
65.18	0.18	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, MODERATELY WEAK ROCK.
65.42	0.24	100		100% MUDSTONE	CARBONACEOUS, BANDS, LIGHT BROWN, MODERATELY WEAK ROCK.
65.70	0.28	100		100% COAL, DULL	
65.77	0.07	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
65.83	0.06	100		100% MUDSTONE	LIGHT GREY.
65.86	0.03	100		100% COAL, DULL	LIGHT BROWN.
65.87	0.01	100		100% MUDSTONE	WEAK ROCK.
66.11	0.24	100		100% COAL, HEAVY DULL	
66.12	0.01	100		100% MUDSTONE	LIGHT BROWN, VERY WEAK ROCK.
66.22	0.10	100		100% COAL, HEAVY DULL	
66.37	0.15	100		100% MUDSTONE	CARBONACEOUS, LENSES, DARK BROWN.
66.47	0.10	100		100% COAL, HEAVY DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.56	0.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
66.58	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
66.63	0.05	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
66.70	0.07	100		100% COAL, DULL	
67.27	0.57	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.
67.33	0.06	100		100% COAL, DULL	MUDSTONE, LENSES.
67.71	0.38	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
69.13	1.42	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
69.21	0.08	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
70.00	0.79	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
70.55	0.55	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
70.60	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
70.70	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
70.88	0.18	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
71.55	0.67	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
72.64	1.09	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
73.93	1.29	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
73.97	0.04	100		100% MUDSTONE	CALCITIC, BUFF, MODERATELY WEAK ROCK.
74.22	0.25	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
74.64	0.42	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
76.19	1.55	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
76.43	0.24	0		CORE LOSS	
76.60	0.17	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
77.01	0.41	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
77.12	0.11	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
77.15	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
77.27	0.12	100		100% COAL, DULL	
77.30	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
77.32	0.02	100		100% MUDSTONE	LIGHT BROWN, MODERATELY WEAK ROCK.
77.38	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
77.39	0.01	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
77.57	0.18	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
77.68	0.11	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
77.73	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
77.75	0.02	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
77.78	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
77.81	0.03	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
79.01	1.20	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, MODERATELY WEAK ROCK.
79.03	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
79.05	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
79.48	0.43	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, WEAK ROCK.
79.53	0.05	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
80.20	0.67	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
80.45	0.25	100		100% SANDSTONE,FINE GRAINED	GRADING TO, SCREE, BLACK, MODERATELY STRONG ROCK.
80.66	0.21	100		100% SANDSTONE	VERY FINE GRAINED, CARBONACEOUS, DARK GREY, STRONG ROCK.
80.81	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
80.92	0.11	100		100% MUDSTONE	CALCITIC, LIGHT GREY, VERY WEAK ROCK.
81.23	0.31	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
82.06	0.83	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, STRONG ROCK.
82.17	0.11	100		100% COAL	FRAGMENTS, CALCITIC, BROWN-BLACK, MODERATELY STRONG ROCK.
82.40	0.23	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
82.74	0.34	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, DARK GREY, STRONG ROCK.
82.84	0.10	100		100% MUDSTONE	LIGHT GREY, WEAK ROCK.
82.89	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
82.91	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
83.31	0.40	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, CARBONACEOUS, BLACK. FRAGMENTS. STRONG ROCK.
83.77	0.46	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, WITH PLANT REMAINS.
84.09	0.32	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
84.59	0.50	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.88	0.29	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MUDSTONE, BANDS, LIGHT GREY. FRAGMENTS. STRONG ROCK.
87.82	2.94	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.
88.01	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
89.69	1.68	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
90.03	0.34	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
90.33	0.30	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, LIGHT GREY, STRONG ROCK, WITH POOR SORTING.
90.87	0.54	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
91.16	0.29	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
91.36	0.20	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
91.66	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, STRONG ROCK.
94.24	2.58	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
95.06	0.82	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
96.03	0.97	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
96.09	0.06	100		100% MUDSTONE	BROWN-BLACK, VERY WEAK ROCK.
96.15	0.06	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK, WITH POOR SORTING.
96.82	0.67	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
97.00	0.18	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
97.04	0.04	100		100% MUDSTONE	COALY, TRACES, DARK GREY, WEAK ROCK.
97.18	0.14	100		100% COAL, DULL	
97.30	0.12	100		60% COAL, DULL 40% MUDSTONE	BADLY BROKEN. BADLY BROKEN, BROWN. MODERATELY WEAK ROCK.
97.42	0.12	100		100% MUDSTONE	BROWN, WEAK ROCK.
97.70	0.28	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
98.95	1.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
99.25	0.30	100		60% SANDSTONE 40% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, PEBBLY, LIGHT GREY. STRONG ROCK, WITH POOR SORTING.
100.44	1.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
100.57	0.13	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.65	0.08	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK.
102.82	2.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
103.70	0.88	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
113.47	9.77	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
113.64	0.17	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK.
113.89	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
114.10	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LIGHT GREY, STRONG ROCK.
116.40	2.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
116.53	0.13	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK.
116.68	0.15	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
117.04	0.36	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED, LIGHT GREY, STRONG ROCK.
117.23	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
120.50	3.27	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
121.25	0.75	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS. STRONG ROCK.
121.49	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
127.34	5.85	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
128.85	1.51	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
132.06	3.21	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
132.26	0.20	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK, WITH PEBBLE LINEATION.
132.44	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
132.52	0.08	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK, WITH PEBBLE LINEATION.
134.10	1.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
138.73	4.63	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
149.90	11.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
150.47	0.57	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK.
155.06	4.59	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
155.17	0.11	100		100% COAL, HEAVY DULL	
155.31	0.14	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, COARSE GRAINED, LIGHT GREY, STRONG ROCK.
157.26	1.95	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
157.36	0.10	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.52	1.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
164.46	5.94	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
166.59	2.13	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
168.32	1.73	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
168.75	0.43	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, MODERATELY WEAK ROCK.
168.77	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
173.77	5.00	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
173.91	0.14	100		100% CALCRETE	BUFF, STRONG ROCK.
175.70	1.79	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
177.58	1.88	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
177.90	0.32	100		100% CALCRETE	BUFF, STRONG ROCK.
178.51	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, STRONG ROCK.
179.22	0.71	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
181.12	1.90	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, THICKLY LAMINATED.
181.18	0.06	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, STRONG ROCK.
189.53	8.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
189.92	0.39	100		100% CALCRETE	BUFF, STRONG ROCK.
190.55	0.63	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY-GREEN, WITH KAOLINITE, STRONG ROCK.
190.70	0.15	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY. BLACK. MODERATELY STRONG ROCK, VERY THINLY BEDDED, BASAL CONTACT EROSIONAL.
190.74	0.04	100		100% MUDSTONE	SANDSTONE, LENSES, GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
190.86	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
191.76	0.90	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, VERY STRONG ROCK.
191.81	0.05	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
191.85	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
191.95	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COARSE GRAINED, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
192.09	0.14	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
192.34	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COARSE GRAINED, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK.
192.38	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
192.42	0.04	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, FRAGMENTS, VERY STRONG ROCK.
192.54	0.12	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
192.77	0.23	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
193.25	0.48	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. STRONG ROCK.
193.70	0.45	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, DARK GREY, STRONG ROCK.
194.63	0.93	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LAMINAE, DARK GREY, STRONG ROCK.
194.91	0.28	100		60% MUDSTONE 40%	DARK GREY. MODERATELY STRONG ROCK.
194.96	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
195.01	0.05	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, VERY STRONG ROCK.
195.08	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
195.49	0.41	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY, VERY STRONG ROCK.
196.18	0.69	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT BROWN, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
196.91	0.73	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
196.97	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
198.23	1.26	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
198.61	0.38	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, STRONG ROCK.
199.56	0.95	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
199.59	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
				TOP OF DALMAYNE E : 200.41 M R.L.	
199.88	0.29	100	1	100% COAL, DULL	
199.92	0.04	100	1	100% COAL, HEAVY DULL	
200.06	0.14	100	1	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
200.10	0.04	100	1	100% COAL, HEAVY DULL	
200.11	0.01	100	1	100% TONSTEIN	
200.13	0.02	100	1	100% COAL, HEAVY DULL	
200.15	0.02	100	1	100% TONSTEIN	
200.20	0.05	100	1	100% COAL, HEAVY DULL	
200.88	0.68	100	1	100% COAL, DULL	
200.93	0.05	100	1	100% COAL, HEAVY DULL	
201.10	0.17	100	2	100% COAL, DULL	
201.12	0.02	100	2	100% TONSTEIN	
201.14	0.02	100	2	100% COAL, DULL	
201.15	0.01	100	2	100% TONSTEIN	
201.43	0 28	100	2	100% COAL, DULL	
201.49	0.06	100	2	100% COAL, HEAVY DULL	
201.66	0.17	100	2	100% COAL, DULL	
201.68	0.02	100	2	100% COAL, HEAVY DULL	
201.70	0.02	100	2	100% TONSTEIN	
201.72	0.02	100	2	100% COAL, HEAVY DULL	
				BASE OF DALMAYNE E : THICKNESS= 2.13 M; SAMPLED THICKNESS= 2.13 M	
202.03	0.31	100		100% MUDSTONE	MODERATELY WEAK ROCK, WITH PLANT REMAINS.
202.07	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	
202.08	0.01	100		100% MUDSTONE	CALCITIC, MODERATELY WEAK ROCK.
202.10	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	
202.70	0.60	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, WITH PLANT REMAINS.
203.38	0.68	100		80% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE	LIGHT GREY. STRONG ROCK, VERY THINLY BEDDED.
203.80	0.42	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
204.43	0.63	100		100% SANDSTONE	VERY FINE GRAINED, GREY, STRONG ROCK.
204.53	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
204.61	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, BADLY BROKEN, LIGHT GREY, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
204.89	0.28	100		100% SANDSTONE	VERY FINE GRAINED, BADLY BROKEN, GREY, MODERATELY STRONG ROCK.
205.20	0.31	0		CORE LOSS	
205.44	0.24	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK.
205.70	0.26	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY, MODERATELY WEAK ROCK.
206.22	0.52	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
206.25	0.03	100		100% MUDSTONE	CALCITIC, LIGHT GREEN, WEAK ROCK.
206.74	0.49	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. BLACK. MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED.
206.91	0.17	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
				TOP OF DALMAYNE E2 : 193.09 M R.L.	
206.92	0.01	100		100% COAL, DULL	
206.94	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
207.02	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
207.43	0.41	100		100% COAL, HEAVY DULL	
207.53	0.10	100		100% COAL, DULL	
207.61	0.08	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
				BASE OF DALMAYNE E2 : THICKNESS= 0.70 M; SAMPLED THICKNESS= 0.00 M	
208.25	0.64	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING.
208.35	0.10	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
208.66	0.31	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
209.35	0.69	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, STRONG ROCK.
209.37	0.02	100		100% COAL, BRIGHT	
209.40	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
209.41	0.01	100		100% COAL, BRIGHT	
209.82	0.41	100		100% SANDSTONE	VERY FINE GRAINED, GREY.
210.00	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.26	2.26	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, WITH PLANT REMAINS.
212.99	0.73	100		50% SANDSTONE 50% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, GREY. STRONG ROCK, THICKLY LAMINATED, LAMINATED.
214.16	1.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
214.70	0.54	100		100% SANDSTONE	VERY FINE GRAINED, GREY, STRONG ROCK, LAMINATED.
				TOP OF DALMAYNE E3 : 185.30 M R.L.	
214.78	0.08	100		100% COAL, DULL	
214.79	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
214.83	0.04	100		100% COAL, DULL	
				BASE OF DALMAYNE E3 : THICKNESS= 0.13 M; SAMPLED THICKNESS= 0.00 M	
214.85	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
215.05	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
215.14	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, STRONG ROCK.
215.48	0.34	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, MODERATELY WEAK ROCK.
215.82	0.34	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
216.16	0.34	100		100% SANDSTONE,FINE GRAINED	DARK GREY, MODERATELY STRONG ROCK.
216.25	0.09	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
216.42	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
216.82	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
217.70	0.88	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
218.36	0.66	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
219.17	0.81	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
219.82	0.65	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK, LAMINATED.
219.88	0.06	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
219.96	0.08	100		100% COAL, DULL	
220.00	0.04	100		100% MUDSTONE	COALY, TRACES, DARK BROWN, MODERATELY STRONG ROCK.
220.01	0.01	100		100% COAL, DULL	
220.59	0.58	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, DARK GREY, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
220.72	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
220.83	0.11	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
220.84	0.01	100		100% COAL, BRIGHT	
221.03	0.19	100		100% CARBONACEOUS SHALE	BLACK, MODERATELY STRONG ROCK.
221.29	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, DARK BROWN, MODERATELY STRONG ROCK.
221.60	0.31	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
222.77	1.17	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, STRONG ROCK.
224.23	1.46	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH PLANT REMAINS.
224.58	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
224.69	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
224.78	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
224.99	0.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
227.57	2.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
229.76	2.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
230.38	0.62	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
230.81	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
230.88	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
231.16	0.28	100		100% COAL, HEAVY DULL	WITH PYRITE ON FRACTURES.
231.41	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
233.08	1.67	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
249.15	16.07	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY, STRONG ROCK.
249.55	0.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
250.66	1.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
250.92	0.26	100		100% PEBBLE CONGLOMERATE	LIGHT GREY, STRONG ROCK.
251.71	0.79	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED, LIGHT GREY, STRONG ROCK.
251.98	0.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, STRONG ROCK.
252.21	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
252.66	0.45	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
252.74	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
253.68	0.94	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
253.81	0.13	100		100% COAL, DULL	MUDSTONE, BANDS.
253.92	0.11	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, GREY, STRONG ROCK.
253.95	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
254.31	0.36	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
254.44	0.13	100		100% SANDSTONE,MEDIUM GRAINED	POORLY SORTED, LIGHT GREY, STRONG ROCK.
255.67	1.23	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK, WITH DISTURBED BEDDING.
255.99	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, POORLY SORTED, BUFF, STRONG ROCK.
256.07	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
256.12	0.05	100		100% MUDSTONE	DARK BROWN, MODERATELY WEAK ROCK.
256.15	0.03	100		100% COAL, HEAVY DULL	
256.16	0.01	100		100% TONSTEIN	DARK BROWN, MODERATELY WEAK ROCK.
256.24	0.08	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
257.15	0.91	100		85% MUDSTONE 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, GREY. LENSES, LIGHT GREY. STRONG ROCK.
257.69	0.54	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK.
257.73	0.04	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
257.77	0.04	100		100% MUDSTONE	COALY, LENSES, BROWN, MODERATELY WEAK ROCK.
257.89	0.12	100		100% COAL, INTERBANDED DULL AND BRIGHT	
257.94	0.05	100		100% CARBONACEOUS MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
258.30	0.36	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
258.70	0.40	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
259.56	0.86	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, LIGHT GREY, MODERATELY WEAK ROCK.
262.86	3.30	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, GREY. STRONG ROCK, VERY THINLY BEDDED.
263.03	0.17	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, MODERATELY WEAK ROCK.
263.05	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK, THICKLY LAMINATED.
263.08	0.03	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
263.14	0.06	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
263.20	0.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, GREY, STRONG ROCK.
263.43	0.23	100		100% SANDSTONE,MEDIUM GRAINED	POORLY SORTED, LIGHT GREY, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
263.45	0.02	100		100% COAL, DULL	
263.50	0.05	100		100% MUDSTONE	LIGHT GREY.
263.66	0.16	100		100% SANDSTONE,MEDIUM GRAINED	CALCITIC, WHITE, STRONG ROCK.
263.77	0.11	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK.
264.00	0.23	100		100% SANDSTONE	VERY FINE GRAINED, GREY, STRONG ROCK.
264.16	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, STRONG ROCK.
264.19	0.03	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
264.24	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
265.65	1.41	100		100% SANDSTONE,FINE GRAINED	GREY, MODERATELY STRONG ROCK.
266.29	0.64	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LENSES, GREY. STRONG ROCK.
266.68	0.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, STRONG ROCK.
266.92	0.24	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
266.93	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
267.10	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
267.11	0.01	100		100% COAL, DULL	
267.12	0.01	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
267.13	0.01	100		100% COAL, DULL	
267.15	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
267.16	0.01	100		100% COAL, DULL	
267.19	0.03	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
267.43	0.24	100		100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
267.50	0.07	100		50% COAL, DULL 50% SANDSTONE,MEDIUM GRAINED	GREY. WITH DISTURBED BEDDING.
267.59	0.09	100		100% COAL, DULL	
267.72	0.13	100		100% SANDSTONE,FINE GRAINED	GREY, STRONG ROCK.
267.84	0.12	100		100% SANDSTONE,MEDIUM GRAINED	GREY, STRONG ROCK.
267.96	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK.
267.97	0.01	100		100% MUDSTONE	WHITE, MODERATELY STRONG ROCK.
268.00	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
268.01	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
268.02	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
268.04	0.02	100		100% MUDSTONE	BROWN, MODERATELY WEAK ROCK.
268.09	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK.
268.19	0.10	100		100% SANDSTONE,COARSE GRAINED	GRADING TO, FINE GRAINED, GREEN-BROWN, WITH GRANULAR QUARTZ, STRONG ROCK.
269.91	1.72	100		100% SANDSTONE	VERY FINE GRAINED, GREY, WITH GRANULAR QUARTZ, VERY STRONG ROCK.
277.40	7.49	100		100% SILTSTONE	VERY FINE GRAINED, GREY, WITH PEBBLY QUARTZ, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DE	2.13 M	199.59 - 201.72 M	2.13 M
DE2	0.00 M	206.91 - 207.61 M	0.70 M
DE3	0.00 M	214.70 - 214.83 M	0.13 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	199.59 - 200.93 M	1.34 M
2	200.93 - 201.72 M	0.79 M

*** FRAME H03***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 103

HOLE TYPE	CORE
EASTING	598,827 M AM GRID
NORTHING	5,375,219 M AM GRID
ELEVATION	287.60 M
TOTAL DEPTH DRILLED	238.12 M
DRILLING STARTED	16/12/81
DRILLING TIME	10 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
26.00	26.00	5		100% DOLERITE	SCREE, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, HIGH PERMIABILITY.
29.30	3.30	75		100% DOLERITE	SCREE, GREY, SLIGHTLY WEATHERED, VERY STRONG ROCK, MODERATE PERMIABILITY.
30.51	1.21	50		100% MUDSTONE	BAKED, GREY, SLIGHTLY WEATHERED, STRONG ROCK, MODERATE PERMIABILITY.
32.00	1.49	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
32.10	0.10	90		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
32.40	0.30	90		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
32.48	0.08	90		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
32.66	0.18	90		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
32.81	0.15	90		75% CARBONACEOUS MUDSTONE 15% COAL 10% MUDSTONE	BLACK. BRIGHT COAL, BANDS, BLACK. DARK GREY. UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
32.85	0.04	90		100% TONSTEIN	BRIGHT COAL, BANDS, BROWN, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
32.96	0.11	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BLACK. DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
32.98	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
33.03	0.05	100		60% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL	BLACK. BRIGHT COAL, BANDS, BLACK. UNWEATHERED, WEAK ROCK, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
33.06	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
33.48	0.42	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
33.58	0.10	100		60% CARBONACEOUS MUDSTONE 30% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	BLACK. CARBONACEOUS, DARK GREY. COALY, FRAGMENTS, GREY. UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
33.99	0.41	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
34.02	0.03	100		100% MUDSTONE	COALY, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
34.14	0.12	100		75% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, WEAK ROCK, JOINTS DIP 80 DEG., INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
34.60	0.46	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
34.80	0.20	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. COALY, STREAKS, DARK GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
35.46	0.66	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
36.27	0.81	100		50% MUDSTONE 25% SANDSTONE,FINE GRAINED 25% SILTSTONE	SANDSTONE, LENSES, GREY. LIGHT GREY. LENSES, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
36.30	0.03	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
36.67	0.37	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
36.81	0.14	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. LENSES, DARK GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
37.20	0.39	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	LENSES, LIGHT GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
37.89	0.69	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 5 DEG., WITH MUD PELLETS, SLIGHT PERMIABILITY.
38.04	0.15	100		100% MUDSTONE	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.95	3.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES, SLIGHT PERMIABILITY.
42.21	0.26	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
42.58	0.37	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
42.75	0.17	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
42.77	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.78	0.01	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
42.86	0.08	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
42.93	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.96	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.98	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
43.00	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
43.03	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
43.09	0.06	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
43.53	0.44	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
44.75	1.22	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
45.40	0.65	100		75% SILTSTONE 25% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
45.47	0.07	100		75% SILTSTONE 25% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, VERY WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 45 DEG., SLIGHT PERMIABILITY.
45.89	0.42	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
46.06	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
46.27	0.21	100		100% MUDSTONE	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
46.85	0.58	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
46.93	0.08	100		85% CARBONACEOUS MUDSTONE 15% COAL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
47.03	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
47.12	0.09	100		95% CARBONACEOUS MUDSTONE 5% COAL	COALY, BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
47.63	0.51	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
48.02	0.39	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
48.20	0.18	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.87	0.67	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
49.15	0.28	100		50% MUDSTONE 50% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.47	1.32	100		50% SANDSTONE,FINE GRAINED 40% SILTSTONE 10% MUDSTONE	INTERCALATIONS, SILTSTONE, LIGHT GREY. GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
50.63	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
50.80	0.17	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 7 DEG., WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
51.67	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
51.88	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
51.99	0.11	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
52.13	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
52.25	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
52.57	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
53.37	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., DISCONTINUITIES INFILLED WITH SOIL (<1, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
54.09	0.72	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.87	0.58	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
55.03	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG., SLIGHT PERMIABILITY.
55.05	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.09	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.17	0.08	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.20	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.23	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.52	0.29	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.54	0.02	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.62	0.08	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.64	0.02	100		100% TONSTEIN	COALY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.73	0.09	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.82	0.09	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
56.01	0.19	100		75% COAL, HEAVY DULL 25% COAL, BRIGHT	GRADING TO, COARSE GRAINED, BLACK. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
56.33	0.32	100		85% MUDSTONE 15% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY. COALY, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SHEARING AT BEDDING SEPARATION SURFACE, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
56.36	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
58.80	2.44	100		80% MUDSTONE 20% SILTSTONE	SANDSTONE, LENSES, GREY. GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
59.60	0.80	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, FINE GRAINED SANDSTONE, GREY. SILTSTONE, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
59.97	0.37	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
66.87	6.90	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
67.02	0.15	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
67.94	0.92	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
69.23	1.29	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
70.18	0.95	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
70.81	0.63	100		60% SANDSTONE 40% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
71.21	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.56	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
72.70	1.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
73.48	0.78	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
73.98	0.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.12	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.22	0.10	100		95% MUDSTONE 5% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
74.24	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.30	0.06	100		95% MUDSTONE 5% COAL	GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.33	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.62	0.29	100		95% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
75.27	0.65	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
75.90	0.63	100		90% MUDSTONE 10% MUDSTONE	COALY, STREAKS, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
75.93	0.03	100		95% COAL, DULL 5% MUDSTONE	BRIGHT COAL, STREAKS, BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
76.66	0.73	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
77.00	0.34	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
77.63	0.63	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
78.20	0.57	100		60% SILTSTONE 40% MUDSTONE	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
78.56	0.36	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.90	0.34	100		80% MUDSTONE 20% MUDSTONE	MASSIVE, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
78.98	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
80.47	1.49	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
81.00	0.53	100		75% SILTSTONE 25% MUDSTONE	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
81.39	0.39	100		85% MUDSTONE 15% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
81.41	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
81.70	0.29	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	COALY, BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
81.98	0.28	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	COALY, BLACK. LENSES, PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
82.12	0.14	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.19	0.07	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.23	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.25	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.32	0.07	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.39	0.07	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.52	0.13	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.68	0.16	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
82.92	0.24	100		80% MUDSTONE 20% SILTSTONE	CALCAREOUS, GREY. CALCAREOUS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
82.93	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
82.98	0.05	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.05	0.07	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.22	0.17	100		90% COAL, HEAVY DULL 10% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
83.27	0.05	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
83.29	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
83.35	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.40	0.05	100		90% MUDSTONE 10% COAL	CARBONACEOUS, GREY-BROWN. LAMINAE, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.44	0.04	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.60	0.16	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
83.66	0.06	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.74	0.08	100		90% COAL, DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.77	0.03	100		50% TONSTEIN 50% COAL, DULL WITH FEW BRIGHT BANDS	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.81	0.04	100		60% COAL, DULL WITH FEW BRIGHT BANDS 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.86	0.05	100		75% COAL, DULL 25% TONSTEIN	BLACK. COALY, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
83.89	0.03	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.01	0.12	100		95% MUDSTONE 5% COAL	CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.05	0.04	100		100% CHERT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.09	0.04	100		50% CARBONACEOUS MUDSTONE 30% MUDSTONE 20% COAL	BLACK. CREAM. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.13	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
84.17	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
84.19	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
84.21	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.24	0.03	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.30	0.06	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.36	0.06	100		50% MUDSTONE 50% MUDSTONE	COALY, STREAKS, CREAM. CALCAREOUS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.38	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
84.42	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.49	0.07	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
84.63	0.14	100		85% MUDSTONE 15% COAL	CARBONACEOUS, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
84.94	0.31	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
85.48	0.54	100		100% MUDSTONE	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.56	0.08	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.59	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.82	0.23	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.92	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.95	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.96	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.97	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
86.04	0.07	100		95% CARBONACEOUS MUDSTONE 5% COAL	BLACK. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
86.19	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
86.34	0.15	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	COALY, BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
86.36	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
86.46	0.10	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.02	0.56	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.14	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.29	0.15	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.31	0.02	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.58	0.27	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.65	0.07	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
87.80	0.15	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
88.12	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
88.36	0.24	100		95% MUDSTONE 5% COAL	SILTSTONE, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
89.54	1.18	100		50% MUDSTONE 50% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
89.83	0.29	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	INTERCALATIONS, SILTSTONE, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
90.64	0.81	100		80% MUDSTONE 20% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
90.87	0.23	100		90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
91.14	0.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
91.32	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
93.28	1.96	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
93.53	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
93.71	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 70 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
94.20	0.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
94.60	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
96.10	1.50	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE	MASSIVE, LIGHT GREY. MED.-FINE GRAINED, SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
96.51	0.41	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.13	0.62	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.30	0.17	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 7 DEG., SLIGHT PERMIABILITY.
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97.37	0.07	100		90% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.39	0.02	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.47	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.62	0.15	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.68	0.06	100		70% CARBONACEOUS MUDSTONE 20% COAL 10% MUDSTONE	BLACK. STREAKS, BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH DISTURBED BEDDING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
97.75	0.07	100		95% MUDSTONE 5% COAL	LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
97.77	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.82	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
97.90	0.08	100		100% MUDSTONE	CALCAREOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
97.95	0.05	100		90% COAL, DULL 10% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.00	0.05	100		95% MUDSTONE 5% COAL	GREY-BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
98.10	0.10	100		85% CARBONACEOUS MUDSTONE 15% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.15	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.16	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.18	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.36	0.18	100		80% CARBONACEOUS MUDSTONE 10% TONSTEIN 10% COAL, DULL	BLACK. BANDS, CREAM. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
98.56	0.20	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BROWN-BLACK. COALY, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.59	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.66	0.07	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
98.72	0.06	100		85% COAL, DULL WITH FEW BRIGHT BANDS 15% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.76	0.04	100		95% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
98.86	0.10	100		95% CARBONACEOUS MUDSTONE 5% TONSTEIN	COALY, BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
98.89	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.02	0.13	100		85% COAL, DULL WITH FEW BRIGHT BANDS 15% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.14	0.12	100		90% SANDSTONE 10% COAL, BRIGHT	CARBONACEOUS, GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.37	0.23	100		75% SANDSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY-BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
99.42	0.05	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.58	0.16	100		60% SILTSTONE 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.72	0.14	100		80% SILTSTONE 20% TONSTEIN	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.75	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
99.95	0.20	100		50% MUDSTONE 50% SILTSTONE	CARBONACEOUS, BROWN-BLACK. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.02	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.06	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.11	0.05	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.20	0.09	100		80% CARBONACEOUS MUDSTONE 20% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.23	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.24	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.39	0.15	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
100.69	0.30	100		100% MUDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, WEAK ROCK, JOINTS DIP 35 DEG., SLIGHT PERMIABILITY.
100.85	0.16	100		85% COAL, DULL WITH FEW BRIGHT BANDS 10% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
100.86	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.87	0.01	100		100% TONSTEIN	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.91	0.04	100		95% MUDSTONE 5% COAL	LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
100.97	0.06	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
101.07	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
101.13	0.06	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
101.23	0.10	100		95% MUDSTONE 5% COAL	CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
101.25	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.48	0.23	100		95% SILTSTONE 5% COAL	CALCAREOUS, CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
101.63	0.15	100		60% COAL, DULL 30% CARBONACEOUS MUDSTONE 10% MUDSTONE	SILTSTONE, LENSES, BLACK. BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
101.66	0.03	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	CREAM. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
101.74	0.08	100		90% CARBONACEOUS MUDSTONE 10% COAL, DULL	COALY, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
101.76	0.02	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.08	0.32	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
102.11	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.20	0.09	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY-BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.23	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.29	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.48	0.19	100		80% COAL, DULL 20% CARBONACEOUS MUDSTONE	BLACK. MUDSTONE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
102.58	0.10	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
102.59	0.01	100		50% COAL, BRIGHT WITH NUMEROUS DULL BANDS 50% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.66	0.07	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.67	0.01	100		50% COAL, BRIGHT WITH FEW DULL BANDS 50% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.71	0.04	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.74	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.81	0.07	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.92	0.11	100		90% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
				BASE OF DALHAYNE B : THICKNESS= 5.62 M; SAMPLED THICKNESS= 0.00 M	
103.12	0.20	0		CORE LOSS	
103.31	0.19	100		100% MUDSTONE	SILTSTONE, CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.50	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
103.80	0.30	100		90% MUDSTONE 10% SILTSTONE	GREY. BANDS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.67	0.87	100		50% MUDSTONE 25% SILTSTONE 25% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY. LAMINAE, STREAKS, GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
105.45	0.78	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
105.65	0.20	100		50% SANDSTONE,MEDIUM GRAINED 50% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
105.87	0.22	100		100% SILTSTONE	SANDSTONE, LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.07	0.20	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.12	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
106.20	0.08	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.49	0.29	100		75% SILTSTONE 25% SILTSTONE	CARBONACEOUS, DARK GREY. BANDS, CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.65	0.16	100		85% SANDSTONE 15% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
106.76	0.11	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
107.35	0.59	100		90% SANDSTONE,FINE GRAINED 10% COAL	CALCAREOUS, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
107.56	0.21	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
108.37	0.81	100		85% SANDSTONE 10% COAL 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
108.96	0.59	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
109.32	0.36	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
109.42	0.10	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	COALY, STREAKS, DARK GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
109.80	0.38	100		90% MUDSTONE 10% COAL	CARBONACEOUS, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
110.01	0.21	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.40	0.39	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
110.99	0.59	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	CARBONACEOUS, LIGHT GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
111.17	0.18	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. SILTSTONE, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
111.32	0.15	100		80% SANDSTONE 15% SILTSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LENSES, DARK GREY. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
111.72	0.40	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	CARBONACEOUS, DARK GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
112.01	0.29	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	COALY, STREAKS, LIGHT GREY. LENSES, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
112.11	0.10	100		95% MUDSTONE 5% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
113.33	1.22	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
113.98	0.65	100		90% SANDSTONE,MEDIUM GRAINED 5% COAL 5% SANDSTONE,FINE GRAINED	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
114.14	0.16	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
115.43	1.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
116.02	0.59	100		90% SANDSTONE,MEDIUM GRAINED 5% COAL 5% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.13	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
116.31	0.18	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
116.49	0.18	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
117.20	0.71	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP [illegible] DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
117.56	0.36	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
117.67	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
117.84	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
117.96	0.12	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, WITH BANDS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
118.74	0.78	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
119.44	0.70	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	MASSIVE, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
121.70	2.26	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
123.00	1.30	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
123.80	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
123.96	0.16	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
124.50	0.54	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.67	0.17	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT GREY. SILTSTONE, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
125.94	1.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.21	0.27	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY. COALY, FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
126.66	0.45	100		75% MUDSTONE 25% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
126.85	0.19	100		75% MUDSTONE 20% MUDSTONE 5% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, LAMINAE, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
127.13	0.28	100		75% MUDSTONE 25% MUDSTONE	GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
127.18	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.34	0.16	100		85% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 5% COAL	LIGHT GREY. PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
127.54	0.20	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.52	0.98	100		80% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	COALY, STREAKS, LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
128.75	0.23	100		90% SANDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
130.22	1.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.94	0.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.94	1.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
132.48	0.54	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
132.71	0.23	100		60% SANDSTONE 30% SILTSTONE 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LENSES, DARK GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG., WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
133.10	0.39	100		60% SANDSTONE 30% MUDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
133.27	0.17	100		70% SANDSTONE 15% MUDSTONE 15% COAL	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
134.04	0.77	100		75% SANDSTONE 20% MUDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. PELLETAL. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
134.11	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
				TOP OF DALMAYNE C : 153.49 M R.L.	
134.15	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.22	0.07	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
134.49	0.27	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	TUFFACEOUS, LIGHT BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
134.59	0.10	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.67	0.08	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.68	0.01	100		50% COAL, HEAVY DULL 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.72	0.04	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.89	0.17	100		75% COAL, DULL 20% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BLACK. STREAKS, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.98	0.09	100		95% MUDSTONE 5% COAL	TUFFACEOUS, LIGHT BROWN. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
135.07	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
135.18	0.11	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.33	0.15	100		100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.36	0.03	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE,FINE GRAINED	CREAM. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.42	0.06	100		90% COAL, DULL 5% COAL, BRIGHT 5% CARBONACEOUS MUDSTONE	BLACK. BANDS, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.43	0.01	100		50% COAL, DULL 50% MUDSTONE	BLACK. BRIGHT COAL, STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
135.47	0.04	100		95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.48	0.01	100		100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.64	0.16	100		90% COAL, DULL 5% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.69	0.05	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	COALY, BANDS, BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.90	0.21	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.94	0.04	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.98	0.04	100		60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	BLACK. STREAKS, LENSES, BLACK. WITH LENSES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
136.12	0.14	100		80% MUDSTONE 15% CARBONACEOUS MUDSTONE 5% COAL	GREY. BLACK. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
136.72	0.60	100		85% MUDSTONE 10% COAL 5% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, STREAKS, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
				BASE OF DALMAYNE C : THICKNESS= 2.61 M; SAMPLED THICKNESS= 0.00 M	
137.00	0.28	100		50% SANDSTONE 45% CARBONACEOUS MUDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
137.18	0.18	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
137.85	0.67	100		85% MUDSTONE 15% SANDSTONE,MEDIUM GRAINED	LENSES, PELLETAL, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
139.27	1.42	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
145.22	5.95	100		75% SANDSTONE,MEDIUM GRAINED 15% SANDSTONE 10% SILTSTONE	LIGHT GREY. MED.-COARSE GRAINED, BANDS, LIGHT GREY. LAMINAE, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
145.70	0.48	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
145.89	0.19	100		95% SANDSTONE,FINE GRAINED 5% COAL	SILTSTONE, BANDS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
146.10	0.21	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
147.57	1.47	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
148.16	0.59	98		75% SANDSTONE 20% MUDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
148.41	0.25	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
149.35	0.94	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
150.02	0.67	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
150.92	0.90	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
151.67	0.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
152.01	0.34	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
152.99	0.98	100		80% SANDSTONE 20% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
153.46	0.47	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
154.25	0.79	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
154.80	0.55	100		95% SANDSTONE 5% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
156.05	1.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
156.72	0.67	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
157.20	0.48	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
157.55	0.35	100		80% SANDSTONE 15% MUDSTONE 5% COAL	MED.-FINE GRAINED, BANDS, LIGHT GREY. PELLETAL, LENSES, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
157.91	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.18	0.27	100		50% SANDSTONE 45% SANDSTONE,FINE GRAINED 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. CARBONACEOUS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.58	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.79	0.21	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
160.75	1.96	100		60% SANDSTONE 40% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, MASSIVE, LIGHT GREY. CALCAREOUS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.32	0.57	100		70% MUDSTONE 30% SANDSTONE	PELLETAL, FRAGMENTS, GREY. MED.-COARSE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
163.54	2.22	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
163.66	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
163.75	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
164.24	0.49	100		75% SANDSTONE,FINE GRAINED 25% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
165.24	1.00	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.93	0.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
166.49	0.56	98		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	COALY, STREAKS, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
166.67	0.18	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
169.61	2.94	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.16	0.55	100		70% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE 5% COAL	MUDSTONE, LENSES, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
172.20	2.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
172.36	0.16	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
173.92	1.56	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
174.28	0.36	100		90% SANDSTONE 5% MUDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
174.43	0.15	100		100% MUDSTONE	SILTSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
175.46	1.03	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
176.40	0.94	100		90% SANDSTONE,FINE GRAINED 10% COAL	COALY, STREAKS, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
177.32	0.92	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
177.54	0.22	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.70	1.16	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.87	0.17	100		80% SANDSTONE 10% COAL 10% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
180.80	1.93	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
181.25	0.45	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
184.32	3.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, EFFECTIVELY IMPERMIABLE.
184.72	0.40	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., EFFECTIVELY IMPERMIABLE.
185.30	0.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
185.38	0.08	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
185.93	1.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, EFFECTIVELY IMPERMIABLE.
187.02	0.09	100		100% SILTSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
187.15	0.13	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
187.25	0.10	100		70% SILTSTONE 30% COAL, BRIGHT	GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
187.39	0.14	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
188.42	1.03	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
188.66	0.24	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	CALCAREOUS, WHITE. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.95	0.29	100		80% SANDSTONE,MEDIUM GRAINED 15% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
189.13	0.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
189.35	0.22	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, EFFECTIVELY IMPERMIABLE.
190.04	0.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
190.27	0.23	100		95% MUDSTONE 5% COAL	SILTSTONE, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
190.51	0.24	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
191.00	0.49	100		50% MUDSTONE 50% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
191.50	0.50	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. COALY, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
191.76	0.26	100		70% MUDSTONE 30% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. COALY, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
191.77	0.01	100		100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
191.92	0.15	100		80% MUDSTONE 20% COAL	GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
192.30	0.38	100		80% SILTSTONE 20% SILTSTONE	INTERCALATIONS, MUDSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				TOP OF DALMAYNE D UPPER : 95.30 M R.L.	
192.48	0.18	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
192.67	0.19	100		90% COAL, DULL 10% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
192.74	0.07	100		70% COAL, HEAVY DULL 30% MUDSTONE	GRADING TO, COARSE GRAINED, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.44 M; SAMPLED THICKNESS= 0.00 M	
193.04	0.30	100		90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
193.13	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
193.47	0.34	100		90% MUDSTONE 5% COAL 5% SILTSTONE	CARBONACEOUS, DARK GREY. FRAGMENTS, STREAKS, BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.60	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.66	0.06	100		95% MUDSTONE 5% COAL	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
193.95	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
194.48	0.53	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	INTERCALATIONS, SILTSTONE, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
194.95	0.47	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
196.10	1.15	100		60% SANDSTONE,FINE GRAINED 20% SILTSTONE	SILTSTONE, LENSES, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
196.18	0.08	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
196.25	0.07	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
197.64	1.39	100		95% SANDSTONE 5% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
198.49	0.85	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
203.28	4.79	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
203.57	0.29	100		80% SANDSTONE,MEDIUM GRAINED 15% CARBONACEOUS MUDSTONE 5% COAL	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
205.12	1.55	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 7 DEG., EFFECTIVELY IMPERMIABLE.
205.42	0.30	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
207.00	1.58	100		45% SANDSTONE,COARSE GRAINED 45% SANDSTONE 10% COAL	BANDS, LIGHT GREY. MED.-FINE GRAINED, BANDS, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
207.82	0.82	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
208.10	0.28	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
208.81	0.71	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
209.19	0.38	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
209.52	0.33	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
209.73	0.21	100		60% SANDSTONE,FINE GRAINED 30% SANDSTONE 10% COAL	LIGHT GREY. MED.-COARSE GRAINED, BANDS, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
210.01	0.28	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
210.32	0.31	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
210.73	0.41	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
211.30	0.57	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
211.71	0.41	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., EFFECTIVELY IMPERMIABLE.
211.95	0.24	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.39	0.44	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	COALY, STREAKS, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
213.50	1.11	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
213.65	0.15	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
215.17	1.52	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
215.50	0.33	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
215.80	0.30	100		85% SANDSTONE 10% COAL 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
220.36	4.56	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
221.21	0.85	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
221.72	0.51	100		85% SANDSTONE 15% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
222.75	1.03	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
223.10	0.35	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
223.33	0.23	100	103T1	100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
223.40	0.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
223.60	0.20	100		95% SANDSTONE 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
223.67	0.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
223.81	0.14	100	103T2	100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
223.97	0.16	100	103T2	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
				TOP OF DALMAYNE D LOWER : 63.63 M R.L.	
223.99	0.02	100	103A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.07	0.08	100	103A1	100% COAL, MID LUSTROUS	BRIGHT COAL, LAMINAE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.11	0.04	100	103A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
224.12	0.01	100	103A1	50% COAL, DULL 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.16	0.04	100	103A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.20	0.04	100	103A1	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.22	0.02	100	103A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.24	0.02	100	103A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.26	0.02	100	103A1	75% COAL, BRIGHT 25% COAL, MID LUSTROUS - BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.29	0.03	100	103A1	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.37	0.08	100	103A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.38	0.01	100	103A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
224.40	0.02	100	103A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.41	0.01	100	103A1	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
224.43	0.02	100	103A1	100% TONSTEIN	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.45	0.02	100	103A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.48	0.03	100	103A1	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.49	0.01	100	103A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.50	0.01	100	103A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.54	0.04	100	103A2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.61	0.07	100	103A2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.66	0.05	100	103A2	60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	BROWN. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.69	0.03	100	103A2	85% COAL, MID LUSTROUS 15% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.72	0.03	100	103A2	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.75	0.03	100	103A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.90	0.15	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.01	0.11	100	103A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.05	0.04	100	103A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.07	0.02	100	103A2	100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.08	0.01	100	103A2	50% COAL, BRIGHT 50% COAL, MID LUSTROUS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.11	0.03	100	103A2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
225.12	0.01	100	103A2	50% COAL, BRIGHT 50% COAL, MID LUSTROUS	BLACK. BRIGHT COAL, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
225.14	0.02	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.15	0.01	100	103A2	50% MUDSTONE 50% COAL, DULL	BANDS, BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.18	0.03	100	103A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.19	0.01	100	103A2	50% MUDSTONE 50% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.21	0.02	100	103A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.24	0.03	100	103A2	50% COAL, BRIGHT 50% CARBONACEOUS MUDSTONE	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.25	0.01	100	103A2	50% COAL, BRIGHT WITH NUMEROUS DULL BANDS 50% CLAY	BLACK. BLACK. UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
225.34	0.09	100	103A2	60% COAL, DULL WITH FEW BRIGHT BANDS 40% CARBONACEOUS MUDSTONE	BLACK. BRIGHT COAL, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.38	0.04	100	103A2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.39	0.01	100	103A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.40	0.01	100	103A2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.56	0.16	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.58	0.02	100	103A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.63	0.05	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.64	0.01	100	103A2	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
225.67	0.03	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.69	0.02	100	103A2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
225.70	0.01	100	103A2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.76	0.06	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.80	0.04	100	103A2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.82	0.02	100	103A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
225.83	0.01	100	103A2	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.86	0.03	100	103A2	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.89 M; SAMPLED THICKNESS= 1.89 M	
225.91	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.06	0.15	100	103T4	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.10	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, SLIGHT PERMIABILITY.
226.12	0.02	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.18	0.06	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
226.32	0.14	100	103T5	75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
226.42	0.10	100	103T6	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
226.45	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
226.46	0.01	100		50% MUDSTONE 50% COAL, BRIGHT	GREY. BRIGHT COAL, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.70	0.24	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
226.74	0.04	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.75	0.01	100		50% MUDSTONE 50% CLAY	DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.78	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.79	0.01	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
226.80	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
226.82	0.02	100		100% CLAY	GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
226.86	0.04	100		95% MUDSTONE 5% COAL	GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
226.90	0.04	100		100% CLAY	GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
227.00	0.10	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
227.06	0.06	100		60% MUDSTONE 40% MUDSTONE	COALY, STREAKS, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
227.09	0.03	100		50% MUDSTONE 50% CLAY	GREY. GREY. UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
227.10	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
227.13	0.03	100		100% CLAY	GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
227.14	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
227.16	0.02	100		100% CLAY	GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
227.17	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
227.22	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
227.26	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
227.30	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
227.35	0.05	100		75% MUDSTONE 25% COAL, DULL	BANDS, LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
227.45	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
227.76	0.31	100		100% MUDSTONE	MASSIVE, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, SLIGHT PERMIABILITY.
228.47	0.71	100		75% MUDSTONE 25% SILTSTONE	MASSIVE, GREY. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, SLIGHT PERMIABILITY.
228.87	0.40	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
230.68	1.81	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
231.50	0.82	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., EFFECTIVELY IMPERMIABLE.
232.02	0.52	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
232.09	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
232.86	0.77	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
233.07	0.21	100		80% SANDSTONE,MEDIUM GRAINED 15% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
233.26	0.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
233.39	0.13	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
234.56	1.17	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
234.80	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
236.18	1.38	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
236.46	0.28	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
238.12	1.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	97.30 - 102.92 M	5.62 M
DC	0.00 M	134.11 - 136.72 M	2.61 M
DDU	0.00 M	192.30 - 192.74 M	0.44 M
DDL	1.89 M	223.97 - 225.86 M	1.89 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
103T1	223.10 - 223.33 M	0.23 M
103T2	223.67 - 223.97 M	0.30 M
103A1	223.97 - 224.50 M	0.53 M
103A2	224.50 - 225.86 M	1.36 M
103T4	225.91 - 226.06 M	0.15 M
103T5	226.18 - 226.32 M	0.14 M
103T6	226.32 - 226.42 M	0.10 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 104

HOLE TYPE	CORE
EASTING	599,242 M AM GRID
NORTHING	5,374,718 M AM GRID
ELEVATION	251.10 M
TOTAL DEPTH DRILLED	172.50 M
DRILLING STARTED	19/01/82
DRILLING TIME	10 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.0[illegible]		20		100% DOLERITE	SCREE, GREY-BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
12.00		100		100% MUDSTONE	SILTSTONE, GREY, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
16.50	4.50	10		75% SANDSTONE 25% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, LIGHT GREY. BADLY BROKEN, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
16.70	0.20	50		100% MUDSTONE	GREY, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
16.77	0.07	50		100% MUDSTONE	GREY, HIGHLY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
16.87	0.10	50		100% MUDSTONE	GREY, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
17.03	0.16	50		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
17.24	0.21	50		50% COAL, DULL WITH FEW BRIGHT BANDS 50% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BLACK. HIGHLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
19.20	1.96	0		CORE LOSS	
19.50	0.30	100		100% MUDSTONE	CREAM, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
20.38	0.88	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LIGHT GREY. BANDS, GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
20.44	0.06	100		100% MUDSTONE	BANDS, GREY, MODERATELY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
21.14	0.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
21.45	0.31	0		CORE LOSS	
21.84	0.39	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
22.26	0.42	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.50	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
25.50	3.00	30		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	BADLY BROKEN, LIGHT GREY. BADLY BROKEN, GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK. MODERATE PERMIABILITY.
25.80	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
26.00	0.20	0		CORE LOSS	
26.20	0.20	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., MODERATE PERMIABILITY.
26.40	0.20	0		CORE LOSS	
26.56	0.16	100		100% COAL, DULL	BLACK, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
26.59	0.03	90		100% MUDSTONE	BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
26.60	0.01	90		100% CLAY	GREY, MODERATELY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
27.10	0.50	90		100% MUDSTONE	BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
27.25	0.15	90		100% MUDSTONE	GREY, MODERATELY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
27.30	0.05	90		100% CLAY	GREY, MODERATELY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
27.40	0.10	90		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
27.60	0.20	0		CORE LOSS	
27.80	0.20	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
27.94	0.14	0		CORE LOSS	
28.12	0.18	100		100% MUDSTONE	SILTSTONE, GREY, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
28.82	0.70	100		100% MUDSTONE	MASSIVE, GREY, SLIGHTLY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.00	0.18	0		CORE LOSS	
29.20	0.20	100		100% MUDSTONE	BADLY BROKEN, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
29.80	0.60	100		75% MUDSTONE 25% SILTSTONE	GREY. BANDS, GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
30.30	0.50	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE, BANDS, DARK GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
30.60	0.30	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. BANDS, GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
31.50	0.90	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. LAMINAE, BANDS, GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
32.04	0.54	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	BADLY BROKEN, LIGHT GREY. LENSES, BANDS, DARK GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
32.62	0.58	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
32.70	0.08	0		CORE LOSS	
33.20	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
33.70	0.50	80		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
33.80	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
34.05	0.25	0		CORE LOSS	
35.10	1.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.37	0.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
35.57	0.20	0		CORE LOSS	
35.73	0.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
35.77	0.04	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, LIGHT GREY. SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
36.60	0.83	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
36.80	0.20	0		CORE LOSS	
37.16	0.36	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
37.36	0.20	0		CORE LOSS	
37.70	0.34	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
37.90	0.20	0		CORE LOSS	
38.10	0.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
38.25	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
38.57	0.32	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE, BANDS, DARK GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
38.77	0.20	100		90% SANDSTONE,MEDIUM GRAINED 5% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, MODERATE PERMIABILITY.
39.30	0.53	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
39.50	0.20	0		CORE LOSS	
39.90	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
40.20	0.30	0		CORE LOSS	
40.75	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
				TOP OF DALMAYNE B : 210.35 M R.L.	
42.00	1.25	5		80% COAL 20% MUDSTONE	BLACK. GREY. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
42.09	0.09	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
43.50	1.41	5		50% CARBONACEOUS MUDSTONE 25% MUDSTONE 25% COAL	BLACK. GREY. BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
44.40	0.90	0		CORE LOSS	
44.55	0.15	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
44.60	0.05	100		100% CLAYSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
45.10	0.50	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
45.80	0.70	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
46.21	0.41	100		100% MUDSTONE	SILTSTONE, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
46.50	0.29	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
46.60	0.10	0		CORE LOSS	
46.75	0.15	100		100% MUDSTONE	MASSIVE, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.90	0.15	0		CORE LOSS	
46.92	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
46.95	0.03	100		100% MUDSTONE	BANDS, CREAM, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
47.00	0.05	100		80% COAL, DULL 20% CARBONACEOUS MUDSTONE	BLACK. BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
47.25	0.25	100		90% COAL, DULL 10% MUDSTONE	BADLY BROKEN, BLACK. BROWN. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
47.30	0.05	100		95% COAL, DULL 5% MUDSTONE	BLACK. LENSES, CREAM. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
47.33	0.03	100		100% MUDSTONE	BANDS, CREAM, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
47.40	0.07	0		CORE LOSS	
47.43	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
47.50	0.07	0		CORE LOSS	
47.58	0.08	100		100% CLAYSTONE	LIGHT BROWN, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
47.75	0.17	100		80% COAL, DULL 20% MUDSTONE	BADLY BROKEN, BLACK. BANDS, BADLY BROKEN, LIGHT BROWN. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
49.50	1.75	50		75% COAL, DULL 25% MUDSTONE	BADLY BROKEN, BLACK. BANDS, BADLY BROKEN, LIGHT BROWN. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
49.75	0.25	0		CORE LOSS	
49.82	0.07	100		100% CLAYSTONE	CREAM, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
49.90	0.08	100		100% COAL, DULL	BADLY BROKEN, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
50.03	0.13	100		100% MUDSTONE	BADLY BROKEN, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
50.17	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
50.40	0.23	100		100% SANDSTONE,MEDIUM GRAINED	FAULT GOUGE, LIGHT GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
50.54	0.14	100		100% COAL	FAULT GOUGE, BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
				BASE OF DALMAYNE B : THICKNESS= 9.79 M; SAMPLED THICKNESS= 0.00 M	
50.60	0.06	100		100% CLAY	WHITE, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
50.80	0.20	100		100% SANDSTONE,MEDIUM GRAINED	FAULT GOUGE, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
51.51	0.71	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
52.17	0.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
52.46	0.29	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
52.51	0.05	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
52.95	0.44	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
53.64	0.69	100		85% SANDSTONE,FINE GRAINED 10% MUDSTONE 5% SILTSTONE	MASSIVE, LIGHT GREY. LENSES, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
53.98	0.34	100		60% SANDSTONE,FINE GRAINED 30% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. PELLETAL, LENSES, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
54.24	0.26	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
54.42	0.18	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
54.99	0.57	100		80% SANDSTONE,FINE GRAINED 20% COAL	LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
55.19	0.20	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.25	0.06	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
55.49	0.24	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
55.71	0.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
56.10	0.39	100		90% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 5% COAL	LIGHT GREY. PELLETAL, GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
57.80	1.70	100		70% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. BANDS, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
59.03	1.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
59.70	0.67	100		75% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE 5% COAL	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
60.92	1.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.00	0.08	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
61.02	0.02	0		CORE LOSS	
				TOP OF DALMAYNE C : 190.08 M R.L.	
61.09	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.14	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
61.16	0.02	100		80% CARBONACEOUS MUDSTONE 20% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
61.20	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.22	0.02	100		100% CLAY	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
61.23	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.30	0.07	0		CORE LOSS	
61.54	0.24	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
61.57	0.03	0		CORE LOSS	
61.62	0.05	100		100% CLAY	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
61.67	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.52	0.85	100		90% MUDSTONE 10% MUDSTONE	MASSIVE, GREY. TUFFACEOUS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK. SLIGHT PERMIABILITY.
62.57	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
64.10	1.53	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
65.08	0.98	100		80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.19	0.11	100		95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.20	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
65.28	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
65.31	0.03	100		70% MUDSTONE 30% CLAY	TUFFACEOUS, CREAM. LIGHT BROWN. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
65.40	0.09	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
65.45	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.49	0.04	100		80% COAL, DULL WITH FEW BRIGHT BANDS 20% MUDSTONE	BLACK. BRIGHT COAL, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.52	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.53	0.01	100		100% CLAY	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
65.61	0.08	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	DARK GREY. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
65.66	0.05	100		50% COAL, DULL WITH NUMEROUS BRIGHT BANDS 50% COAL, BRIGHT WITH FEW DULL BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
65.68	0.02	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.70	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.78	0.08	100		50% COAL, DULL WITH FEW BRIGHT BANDS 50% COAL, MID LUSTROUS	BADLY BROKEN, BLACK. BRIGHT COAL, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
65.94	0.16	100		75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
65.96	0.02	100		95% MUDSTONE 5% COAL	BANDS, WHITE. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
66.01	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.12	0.11	100		100% CARBONACEOUS MUDSTONE	MASSIVE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.33	0.21	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.47	0.14	100		80% MUDSTONE 15% SILTSTONE 5% MUDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, DARK GREY. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.50	0.03	100		100% MUDSTONE	BANDS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.69	0.19	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, SILTSTONE, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.80	0.11	0		CORE LOSS	
66.92	0.12	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
66.95	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.05	0.10	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.08	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.15	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.20	0.05	100		100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.25	0.05	100		80% CARBONACEOUS MUDSTONE 15% COAL 5% MUDSTONE	STREAKS, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.37	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.42	0.05	100		90% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE C : THICKNESS= 6.40 M; SAMPLED THICKNESS= 0.00 M	
67.60	0.18	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
67.74	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
68.04	0.30	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
68.51	0.47	100		75% MUDSTONE 20% CARBONACEOUS MUDSTONE 5% COAL	GREY. LAMINAE, LENSES, DARK BROWN. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
68.80	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.15	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.38	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.50	0.12	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.60	0.10	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.78	0.18	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
69.95	0.17	100		100% MUDSTONE	MASSIVE, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
70.05	0.10	0		CORE LOSS	
70.20	0.15	100		95% MUDSTONE 5% COAL	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
70.48	0.28	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.65	0.17	100		80% SILTSTONE 20% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.66	1.01	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
71.88	0.22	100		50% SILTSTONE 50% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
72.00	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
72.34	0.34	100		60% MUDSTONE 35% SILTSTONE 5% SANDSTONE,FINE GRAINED	GREY. BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
72.49	0.15	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
73.08	0.59	100		90% SANDSTONE 5% MUDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
73.34	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
73.95	0.61	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
74.13	0.18	100		75% SANDSTONE 25% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LENSES, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
74.32	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
75.00	0.68	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
75.20	0.20	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.90	0.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
76.80	0.90	100		90% SANDSTONE,FINE GRAINED 5% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
77.22	0.42	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
77.65	0.43	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
77.75	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
77.86	0.11	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
78.39	0.53	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
79.13	0.74	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
79.23	0.10	100		60% SANDSTONE,FINE GRAINED 40% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
79.66	0.43	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
80.14	0.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
80.56	0.42	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
80.91	0.35	100		70% SANDSTONE 20% COAL 10% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.73	1.82	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
83.10	0.37	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
83.43	0.33	100		75% SANDSTONE 20% COAL 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
83.94	0.51	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
84.08	0.14	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
84.48	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
84.78	0.30	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
87.40	2.62	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
87.47	0.07	100		100% MUDSTONE	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
88.01	0.54	100		75% SANDSTONE 20% COAL 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
88.22	0.21	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
88.41	0.19	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
89.32	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
90.36	1.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
90.82	0.46	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
91.32	0.50	100		70% MUDSTONE 20% CARBONACEOUS MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK GREY. STREAKS, LENSES, DARK GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
91.50	0.18	100		55% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE 20% MUDSTONE	BANDS, LIGHT GREY. STREAKS, LENSES, BLACK. FRAGMENTS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
91.55	0.05	0		CORE LOSS	
91.68	0.13	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
91.93	0.25	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
99.00	7.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
99.08	0.08	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
99.18	0.10	100		100% CARBONACEOUS MUDSTONE	LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
101.58	2.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
102.07	0.49	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
102.46	0.39	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
102.98	0.52	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
106.23	3.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.41	0.18	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
106.71	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
107.32	0.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
107.65	0.33	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
108.97	1.32	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
110.86	1.89	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
111.05	0.19	100		50% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE 20% MUDSTONE	LIGHT GREY. DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
116.90	5.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
117.30	0.40	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
117.61	0.31	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
117.63	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
117.68	0.05	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, STRONG ROCK, EFFECTIVELY IMPERMIABLE.
118.06	0.38	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	CALCAREOUS, WHITE. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, STRONG ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.21	0.15	100		60% SANDSTONE,FINE GRAINED 25% MUDSTONE 15% CARBONACEOUS MUDSTONE	TUFFACEOUS, GREY. PELLETAL, FRAGMENTS, GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
118.50	0.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
120.10	1.60	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
120.13	0.03	100		50% SANDSTONE,FINE GRAINED 50% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
120.30	0.17	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
120.60	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
120.93	0.33	100		65% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE 15% COAL	LIGHT GREY. PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
121.21	0.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
123.90	2.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
123.98	0.08	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
124.17	0.19	100		50% MUDSTONE 45% CARBONACEOUS MUDSTONE 5% SANDSTONE	CARBONACEOUS, DARK GREY. BLACK. STREAKS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
124.55	0.38	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
124.84	0.29	100		60% SILTSTONE 40% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.95	0.11	100		60% SILTSTONE 40% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
125.57	0.62	100		60% SILTSTONE 40% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.81	0.24	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.94	0.13	100		60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
126.20	0.26	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
126.45	0.25	100		75% SILTSTONE 25% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.54	0.09	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	LENSES, BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.70	0.16	100		90% MUDSTONE 10% COAL	GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
				TOP OF DALMAYNE D UPPER : 124.40 M R.L.	
127.12	0.42	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
127.13	0.01	100		100% MUDSTONE	BANDS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.16	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
127.26	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
127.30	0.04	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
127.42	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.44	0.02	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BRIGHT COAL, STREAKS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.68	0.24	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.98 M; SAMPLED THICKNESS= 0.00 M	
127.75	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.17	0.42	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.19	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.21	0.02	100		100% TONSTEIN	COALY, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.26	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
128.30	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.80	0.50	100		60% SILTSTONE 40% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
129.53	0.73	100		60% SILTSTONE 20% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY. BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.
131.20	1.67	100		60% SILTSTONE 40% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.38	0.18	100		60% SILTSTONE 40% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
131.62	0.24	100		60% MUDSTONE 40% SILTSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
131.84	0.22	100		60% MUDSTONE 40% SILTSTONE	COALY, STREAKS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
132.22	0.38	100		75% SILTSTONE 15% MUDSTONE 10% COAL	GREY. BANDS, GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, [illegible] CARBONACEOUS WISPS, SLIGHT PERMIABIL.
132.50	0.28	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VER[illegible]LY BEDDED, BEDS DIP 5 DEG., SLIGHT PERMI[illegible]ILITY.
132.90	0.40	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
133.12	0.22	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
135.29	2.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
135.55	0.26	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
135.88	0.33	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
136.50	0.62	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
136.62	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
136.94	0.32	100		75% SANDSTONE 25% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., SLIGHT PERMIABILITY.
137.57	0.63	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
137.84	0.27	100		95% SANDSTONE,COARSE GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
138.52	0.68	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY. COALY, FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
139.32	0.80	100		80% SANDSTONE,MEDIUM GRAINED 15% COAL 5% SANDSTONE,FINE GRAINED	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
139.62	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.83	0.21	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
140.28	0.45	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
140.78	0.50	100		65% SANDSTONE,MEDIUM GRAINED 25% COAL 10% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
141.37	0.59	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. MASSIVE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
141.50	0.13	100		80% SANDSTONE,FINE GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
141.56	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
141.66	0.10	100		60% SANDSTONE 40% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 8 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.79	1.13	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
143.24	0.45	100		85% SANDSTONE 10% COAL 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
143.40	0.16	100		70% SANDSTONE 25% COAL 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
143.67	0.27	100		60% SANDSTONE 20% COAL 20% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
144.12	0.45	100		75% SANDSTONE,FINE GRAINED 25% COAL	FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
144.32	0.20	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
144.40	0.08	100		100% MUDSTONE	SILTSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
144.43	0.03	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT GREY. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
144.48	0.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
144.54	0.06	100		90% CARBONACEOUS MUDSTONE 10% COAL	LENSES, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
144.68	0.14	100		85% SANDSTONE,FINE GRAINED 15% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
144.81	0.13	100		100% SANDSTONE	COALY, FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
145.14	0.33	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
145.19	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
145.97	0.78	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
148.40	2.43	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
148.50	0.10	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	CALCAREOUS, WHITE. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
148.52	0.02	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
148.71	0.19	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	CALCAREOUS, WHITE. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
151.41	2.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
151.58	0.17	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
152.90	1.32	100		60% SANDSTONE,MEDIUM GRAINED 40% COAL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
152.99	0.09	100		70% SANDSTONE 20% COAL 10% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
153.54	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
154.82	1.28	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
155.06	0.24	100		80% SANDSTONE,MEDIUM GRAINED 15% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
155.97	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
156.14	0.17	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
157.50	1.36	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
157.64	0.14	100	104T1	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
157.79	0.15	100	104T2	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
157.90	0.11	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
158.05	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.19	0.14	100	104T3	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.28	0.09	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
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158.33	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.36	0.03	100	104A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.42	0.06	100	104A1	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.45	0.03	100	104A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.50	0.05	100	104A1	75% COAL, MID LUSTROUS 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.51	0.01	100	104A1	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.54	0.03	100	104A1	85% COAL, BRIGHT 15% COAL, MID LUSTROUS	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.55	0.01	100	104A1	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.57	0.02	100	104A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
158.65	0.08	100	104A1	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.66	0.01	100	104A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
158.67	0.01	100	104A1	50% COAL, MID LUSTROUS - DULL 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.69	0.02	100	104A1	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.71	0.02	100	104A1	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.73	0.02	100	104A1	75% COAL, BRIGHT 25% COAL, MID LUSTROUS - BRIGHT	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.74	0.01	100	104A1	50% COAL, BRIGHT 40% TONSTEIN 10% CARBONACEOUS MUDSTONE	BANDS, BLACK. LIGHT BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.77	0.03	100	104A1	100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.82	0.05	100	104A1	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.84	0.02	100	104A1	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.86	0.02	100	104A1	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.88	0.02	100	104A1	60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.94	0.06	100	104A2	100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, SLIGHT PERMIABILITY.
158.96	0.02	100	104A2	60% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL	COALY, BLACK. BRIGHT COAL, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.98	0.02	100	104A2	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.99	0.01	100	104A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
159.02	0.03	100	104A2	80% COAL, BRIGHT 20% CARBONACEOUS MUDSTONE	BANDS, BLACK. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.03	0.01	100	104A2	50% CARBONACEOUS MUDSTONE 25% COAL, MID LUSTROUS 25% MUDSTONE	BLACK. BRIGHT COAL, BANDS, BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.05	0.02	100	104A2	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.06	0.01	100	104A2	100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.19	0.13	100	104A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.21	0.02	100	104A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.24	0.03	100	104A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.25	0.01	100	104A2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.47	0.22	100	104A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.49	0.02	100	104A2	100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.53	0.04	100	104A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
159.54	0.01	100	104A2	50% COAL, DULL 50% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.57	0.03	100	104A2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.63	0.06	100	104A2	50% COAL, MID LUSTROUS 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.64	0.01	100	104A2	100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.66	0.02	100	104A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.71	0.05	100	104A2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.72	0.01	100	104A2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.91	0.19	100	104A2	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.92	0.01	100	104A2	100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.93	0.01	100	104A2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.96	0.03	100	104A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
160.01	0.05	100	104A2	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
160.03	0.02	100	104A2	50% COAL, MID LUSTROUS 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
160.06	0.03	100	104A2	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D LOWER : THICKNESS= 1.78 M; SAMPLED THICKNESS= 1.73 M	
160.12	0.06	100		50% MUDSTONE 50% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
160.13	0.01	100		100% CLAYSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, SLIGHT PERMIABILITY.
160.18	0.05	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, SLIGHT PERMIABILITY.
160.32	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
160.40	0.08	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
160.45	0.05	100		75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 25% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
160.53	0.13	100	104T4	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
160.68	0.10	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
160.82	0.14	100	104T5	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
160.90	0.08	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
160.98	0.08	100		50% MUDSTONE 50% MUDSTONE	GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
161.04	0.06	100		85% MUDSTONE 15% CLAYSTONE	GREY. GREY. UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING. EFFECTIVELY IMPERMIABLE.
161.10	0.06	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.16	0.06	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
161.18	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.19	0.01	100		100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.20	0.01	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.21	0.01	100		100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.22	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.28	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.30	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.31	0.01	100		50% COAL, INTERBANDED DULL AND BRIGHT 50% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.40	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
161.48	0.08	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
162.20	0.72	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
162.65	0.45	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
163.00	0.35	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
163.07	0.07	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
163.98	0.91	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
164.46	0.48	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
164.51	0.05	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
164.59	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
164.71	0.12	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
164.73	0.02	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
164.88	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
164.96	0.08	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
165.04	0.08	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
165.35	0.31	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	LIGHT GREY. LAMINAE, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
165.48	0.13	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
165.58	0.10	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	SILTSTONE, LIGHT GREY. LAMINAE, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
165.64	0.06	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
165.71	0.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
165.74	0.03	100		100% SILTSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
165.80	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
172.50	6.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	40.75 - 50.54 M	9.79 M
DC	0.00 M	61.02 - 67.42 M	6.40 M
DDU	0.00 M	126.70 - 127.68 M	0.98 M
DDL	1.73 M	158.28 - 160.06 M	1.78 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
104T1	157.50 - 157.64 M	0.14 M
104T2	157.64 - 157.79 M	0.15 M
104T3	158.05 - 158.19 M	0.14 M
104A1	158.33 - 158.88 M	0.55 M
104A2	158.88 - 160.06 M	1.18 M
104T4	160.45 - 160.58 M	0.13 M
104T5	160.68 - 160.82 M	0.14 M

*** FRAME F10***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 105

HOLE TYPE	CORE
EASTING	598,876 M AM GRID
NORTHING	5,373,627 M AM GRID
ELEVATION	466.10 M
TOTAL DEPTH DRILLED	346.60 M
DRILLING STARTED	10/02/82
DRILLING TIME	17 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.50	3.50	25		100% DOLERITE	SCREE, GREY-BROWN, MODERATELY WEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
19.60	16.10	75		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH TALC ON JOINTS AND CLAY ON JOINTS, UNWEATHERED, EXTREMELY SRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
53.00	33.40	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH TALC ON JOINTS AND CLAY ON JOINTS, UNWEATHERED, EXTREMELY SRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
82.84	29.84	100		100% DOLERITE	MED.-FINE GRAINED, GREY, WITH TALC ON JOINTS AND CLAY ON JOINTS, UNWEATHERED, EXTREMELY SRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
83.54	0.70	100		100% DOLERITE	VERY FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, SLIGHT PERMIABILITY.
84.12	0.58	100		50% MUDSTONE 50% MUDSTONE	MASSIVE, BAKED, GREY-GREEN. BAKED, PURPLE. UNWEATHERED, VERY STRONG ROCK, SLIGHT PERMIABILITY.
84.40	0.28	100		100% MUDSTONE	CARBONACEOUS, BAKED, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
85.22	0.82	100		100% MUDSTONE	CARBONACEOUS, BAKED, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
86.95	1.73	100		100% MUDSTONE	MASSIVE, BAKED, PINK-GREY, UNWEATHERED, WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
88.45	1.50	100		75% MUDSTONE 25% MUDSTONE	MASSIVE, BAKED, GREY-GREEN. MASSIVE, BAKED, CREAM. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
89.19	0.74	100		100% MUDSTONE	BAKED, GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
89.45	0.26	100		100% MUDSTONE	GREEN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
92.10	2.65	100		75% MUDSTONE 25% MUDSTONE	GREY-GREEN. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
94.52	2.42	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, MASSIVE, DARK GREY. MASSIVE, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.30	1.78	100		90% MUDSTONE 10% MUDSTONE	SILTSTONE, MASSIVE, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
96.46	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
96.54	0.08	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
96.60	0.06	100		75% CARBONACEOUS MUDSTONE 25% COAL, BRIGHT	DARK GREY. BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
96.68	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
96.95	0.27	100		100% COAL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, WEAK ROCK, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
97.30	0.35	100		85% CARBONACEOUS MUDSTONE 15% COAL	DARK GREY. BRIGHT COAL, BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
97.53	0.23	100		60% CARBONACEOUS MUDSTONE 40% COAL	COALY, BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
98.38	0.85	100		95% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
99.10	0.72	100		90% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	COALY, BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, SLIGHT PERMIABILITY.
99.74	0.64	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
100.40	0.66	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
101.60	1.20	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
103.40	1.80	100		85% MUDSTONE 15% SILTSTONE	MASSIVE, GREY. BANDS, DARK GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
104.58	1.18	100		80% CARBONACEOUS MUDSTONE 15% MUDSTONE 5% COAL	BLACK. BANDS, GREY. BANDS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
104.96	0.38	100		85% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. BANDS, LENSES, BLACK. LENSES, BANDS, BLACK. UNWEATHERED, MODERATELY STRONG ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.63	0.67	100		85% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE 5% COAL	LIGHT GREY. BLACK. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
106.20	0.57	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
106.50	0.30	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, LIGHT GREY, UNWEATHERED, STRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
106.60	0.10	100		100% DOLERITE	VERY FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
107.30	0.70	100		100% DOLERITE	VERY FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
132.00	24.70	100		100% DOLERITE	MASSIVE, MED.-FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
133.60	1.60	100		100% DOLERITE	MED.-FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
134.56	0.96	100		100% DOLERITE	VERY FINE GRAINED, GREY, UNWEATHERED, EXTREMELY SRONG ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
134.93	0.37	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, GREY-GREEN, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
135.10	0.17	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, GREY-GREEN, WITH CHLORITE ON JOINTS, UNWEATHERED, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., SLIGHT PERMIABILITY.
136.00	0.90	100		100% SANDSTONE,MEDIUM GRAINED	BAKED, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
136.60	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
138.10	1.50	25		100% PEBBLE CONGLOMERATE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
138.54	0.44	80		85% SANDSTONE,MEDIUM GRAINED 15% PEBBLE CONGLOMERATE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
139.20	0.66	80		100% PEBBLE CONGLOMERATE	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
139.50	0.30	90		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
146.19	6.69	20		75% PEBBLE CONGLOMERATE 25% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.30	0.11	100		40% SANDSTONE 30% CARBONACEOUS MUDSTONE 30% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. BLACK. PELLETAL, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
146.54	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
146.64	0.10	100		95% COAL, HEAVY DULL 5% MUDSTONE	GRADING TO, COARSE GRAINED, BLACK. STREAKS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.67	0.03	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.77	0.10	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.79	0.02	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.90	0.11	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.92	0.02	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
146.97	0.05	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.05	0.08	100		100% CLAYSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.15	0.10	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.16	0.01	100		100% CLAYSTONE	BANDS, GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.22	0.06	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.27	0.05	100		100% CLAYSTONE	COALY, STREAKS, GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.39	0.12	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.45	0.06	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, STREAKS, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
147.58	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
147.87	0.29	100		60% CARBONACEOUS MUDSTONE 30% MUDSTONE 10% COAL, HEAVY DULL	BLACK. CARBONACEOUS, DARK GREY. BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
148.02	0.15	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
148.04	0.02	100		100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
148.12	0.08	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
148.22	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
148.25	0.03	100		75% MUDSTONE 25% COAL, DULL	CREAM. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.28	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
148.37	0.09	100		70% MUDSTONE 30% COAL	GREY-BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
148.44	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
148.52	0.08	100		85% MUDSTONE 10% MUDSTONE 5% COAL	GREY. CARBONACEOUS, DARK GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.59	0.07	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, BLACK. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.61	0.02	100		95% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.81	0.20	100		75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
148.89	0.08	100		95% MUDSTONE 5% COAL	GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.93	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
148.98	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
149.03	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.13	0.10	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.17	0.04	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.21	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
149.26	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
149.31	0.05	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.36	0.05	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BLACK. BRIGHT COAL, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.38	0.02	100		95% MUDSTONE 5% COAL, BRIGHT	CARBONACEOUS, GREY-BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.42	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
149.60	0.18	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
149.63	0.03	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
150.10	0.47	100		75% MUDSTONE 25% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
150.25	0.15	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
150.54	0.29	100		55% SANDSTONE,FINE GRAINED 45% SANDSTONE,FINE GRAINED	LIGHT GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
150.64	0.10	100		70% SANDSTONE,FINE GRAINED 30% COAL	SILTSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
151.09	0.45	100		95% SANDSTONE 5% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
151.17	0.08	100		55% CARBONACEOUS MUDSTONE 30% MUDSTONE 15% MUDSTONE	BLACK. CARBONACEOUS, DARK GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
151.31	0.14	100		95% MUDSTONE 5% COAL, BRIGHT	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
151.37	0.06	100		80% COAL, DULL 20% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
151.44	0.07	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
151.54	0.10	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. COALY, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
151.60	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
151.65	0.05	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
151.73	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
151.79	0.06	100		80% SILTSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, BLACK. PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
151.97	0.18	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
152.09	0.12	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
152.98	0.89	100		55% MUDSTONE 40% SILTSTONE 5% CARBONACEOUS MUDSTONE	GREY. GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
153.20	0.22	100		100% CLAYSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
153.23	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
153.28	0.05	100		100% CLAYSTONE	COALY, FRAGMENTS, GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
153.31	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
153.36	0.05	100		60% CARBONACEOUS MUDSTONE 30% MUDSTONE 10% COAL	BLACK. GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
153.39	0.03	100		100% MUDSTONE	COALY, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
153.47	0.08	100		80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
154.01	0.54	100		100% CLAYSTONE	COALY, STREAKS, CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
154.91	0.90	100		100% MUDSTONE	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.22	0.31	100		95% COAL, DULL 5% MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
155.23	0.01	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
155.48	0.25	100		90% COAL, DULL 5% TONSTEIN 5% MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK. BANDS, GREY-BROWN. BANDS, GREY. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
155.58	0.10	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.67	0.09	100		100% COAL, HEAVY DULL	GRADING TO, DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.70	0.03	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.78	0.08	100		50% CARBONACEOUS MUDSTONE 30% MUDSTONE 20% COAL	BLACK. GREY. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.95	0.17	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
156.00	0.05	100		70% CLAYSTONE 20% TONSTEIN 10% MUDSTONE	GREY-BROWN. CREAM. BRIGHT COAL, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
156.03	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
156.18	0.15	100		50% MUDSTONE 40% CARBONACEOUS MUDSTONE 10% COAL	CARBONACEOUS, GREY. BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
156.23	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
156.33	0.10	100		50% MUDSTONE 45% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. GREY. STREAKS, BLACK. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
156.57	0.24	100		50% MUDSTONE 45% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
156.72	0.15	100		100% CLAYSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
156.78	0.06	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
156.80	0.02	100		100% MUDSTONE	BANDS, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
156.99	0.19	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
157.08	0.09	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
157.15	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
157.34	0.19	100		60% MUDSTONE 40% MUDSTONE	COALY, STREAKS, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
158.36	1.02	100		95% MUDSTONE 5% MUDSTONE	MASSIVE, GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
158.84	0.48	100		50% SILTSTONE 45% MUDSTONE 5% CARBONACEOUS MUDSTONE	MASSIVE, GREY. GREY. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.18	0.34	100		55% MUDSTONE 45% SILTSTONE	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.37	0.19	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
159.42	0.05	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
159.63	0.21	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
159.79	0.16	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
160.63	0.84	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
161.75	1.12	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, FINE GRAINED SANDSTONE, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
162.94	1.19	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
163.73	0.79	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
164.06	0.33	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
164.65	0.59	100		60% SILTSTONE 40% SANDSTONE	LAMINAE, INTERCALATIONS, GREY. MED.-FINE GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, WITH PLANT REMAINS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
164.96	0.31	100		98% SANDSTONE,FINE GRAINED 2% SILTSTONE	GRADING TO, MED.-FINE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
165.03	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
165.50	0.47	100		80% SANDSTONE,MEDIUM GRAINED 15% SANDSTONE,FINE GRAINED 5% SILTSTONE	BANDS, INTERCALATIONS, LIGHT GREY. LAMINAE, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
165.53	0.03	100		100% COAL	FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.57	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
165.67	0.10	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.68	0.01	100		100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.72	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.99	0.27	100		99% COAL, DULL WITH NUMEROUS BRIGHT BANDS 1% MUDSTONE	BLACK. STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
166.03	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
166.31	0.28	100		95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. BANDS, PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
166.34	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
166.43	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
166.55	0.12	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 3 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
166.73	0.18	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
167.08	0.35	100		75% SANDSTONE 25% SANDSTONE	MED.-FINE GRAINED, GRADING TO, GREY. VERY FINE GRAINED, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
167.62	0.54	100		75% SILTSTONE 25% SANDSTONE	GREY. VERY FINE GRAINED. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
168.21	0.59	100		100% TUFF	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 8 DEG., SLIGHT PERMIABILITY.
168.26	0.05	100		100% CARBONACEOUS MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
168.27	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, SLIGHT PERMIABILITY.
168.40	0.13	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
168.47	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
168.58	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
168.67	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
169.16	0.49	100		100% TUFF	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., WITH BURROWING, SLIGHT PERMIABILITY.
169.48	0.32	100		70% CARBONACEOUS MUDSTONE 30% COAL	BANDS, INTERCALATIONS, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
169.55	0.07	100		95% MUDSTONE 5% COAL	CARBONACEOUS, DARK BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
169.58	0.03	100		90% MUDSTONE 10% MUDSTONE	INTERCALATIONS, CREAM. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, SLIGHT PERMIABILITY.
169.78	0.20	100		75% SILTSTONE 25% SANDSTONE	BANDS, INTERCALATIONS, GREY. VERY FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, SLIGHT PERMIABILITY.
170.31	0.53	100		89% MUDSTONE 10% MUDSTONE 1% SANDSTONE	GREY. CARBONACEOUS, DARK BROWN. VERY FINE GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, SLIGHT PERMIABILITY.
170.78	0.47	100		100% SILTSTONE	LAMINAE, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
171.76	0.98	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, TIGHT NON PLANAR, SLIGHT PERMIABILITY.
172.34	0.58	100		90% SANDSTONE 10% SILTSTONE	VERY FINE GRAINED, INTERCALATIONS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, SLIGHT PERMIABILITY.
172.52	0.18	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 67 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
172.72	0.20	100		90% SILTSTONE 10% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
173.39	0.67	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
173.47	0.08	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
173.94	0.47	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
174.86	0.92	100		95% SANDSTONE 5% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
175.99	1.13	100		60% SILTSTONE 40% SANDSTONE	LAMINAE, INTERCALATIONS, GREY. VERY FINE GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
176.31	0.32	100		85% SANDSTONE,MEDIUM GRAINED 15% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
176.57	0.26	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. LAMINAE, LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
176.67	0.10	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
176.68	0.01	100		100% COAL, BRIGHT	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
176.96	0.28	100		60% COAL, INTERBANDED DULL AND BRIGHT 40% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
177.21	0.25	100		70% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% COAL, BRIGHT WITH NUMEROUS DULL BANDS 10% MUDSTONE	BLACK. BANDS, STREAKS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
177.27	0.06	100		60% SILTSTONE 30% SILTSTONE 10% COAL	GREY. CARBONACEOUS, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.42	0.15	100		80% MUDSTONE 20% COAL, BRIGHT	SILTSTONE, CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
177.73	0.31	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
178.01	0.28	100		95% MUDSTONE 5% COAL	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
178.49	0.48	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
178.73	0.24	100		95% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
179.22	0.49	100		90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
180.00	0.78	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
180.43	0.43	100		80% SANDSTONE,FINE GRAINED 20% COAL	SILTSTONE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
182.47	2.04	100		60% SILTSTONE 40% MUDSTONE	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
182.86	0.39	100		90% SILTSTONE 10% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
183.67	0.81	100		75% MUDSTONE 15% SILTSTONE 10% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
184.47	0.80	100		75% SANDSTONE,FINE GRAINED 20% SILTSTONE 5% MUDSTONE	LIGHT GREY. BANDS, LAMINAE, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
184.87	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
185.02	0.15	100		100% SILTSTONE	MASSIVE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
185.17	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
185.56	0.39	100		70% SANDSTONE,MEDIUM GRAINED 20% COAL 10% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
185.84	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
186.15	0.31	100		75% SANDSTONE 15% COAL 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
186.39	0.24	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
186.58	0.19	100		75% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE 5% COAL	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
186.78	0.20	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
186.82	0.04	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.07	0.25	100		95% COAL, DULL 5% MUDSTONE	BLACK. BANDS, STREAKS, BROWN. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
187.10	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
187.11	0.01	100		100% CLAYSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
187.13	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.15	0.02	100		100% CLAYSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
187.25	0.10	100		100% SILTSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.32	0.07	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.40	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.45	0.05	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
187.60	0.15	0		CORE LOSS	
187.62	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
187.77	0.15	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
188.05	0.28	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
188.11	0.06	100		80% CARBONACEOUS MUDSTONE 15% COAL, DULL 5% MUDSTONE	BLACK. BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
188.13	0.02	100		100% CLAYSTONE	COALY, STREAKS, CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
188.37	0.24	100		80% COAL, DULL 15% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% MUDSTONE	BLACK. BLACK. PELLETAL, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
188.45	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
188.88	0.43	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
188.90	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.95	0.05	100		60% COAL, DULL 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
189.27	0.32	100		90% COAL, DULL WITH FEW BRIGHT BANDS 10% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
189.30	0.03	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	COALY, BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
189.37	0.07	100		100% MUDSTONE	COALY, STREAKS, WHITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
189.41	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
189.43	0.02	100		100% CLAYSTONE	COALY, STREAKS, CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
189.45	0.02	100		75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 25% MUDSTONE	STREAKS, FRAGMENTS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
189.52	0.07	100		100% MUDSTONE	COALY, STREAKS, WHITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
189.65	0.13	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. PELLETAL, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
189.70	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
189.72	0.02	100		100% MUDSTONE	WHITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
189.90	0.18	100		90% COAL, INTERBANDED DULL AND BRIGHT 5% MUDSTONE 5% COAL, BRIGHT WITH FEW DULL BANDS	BLACK. LENSES, PELLETAL, GREY. BLACK. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
190.04	0.14	100		95% MUDSTONE 5% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.23	0.19	100		95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. LENSES, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.25	0.02	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.29	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.30	0.01	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
190.42	0.12	100		85% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT WITH FEW DULL BANDS	BLACK. BLACK. BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.44	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.53	0.09	100		90% CARBONACEOUS MUDSTONE 10% COAL	BLACK. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.87	0.34	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
191.40	0.53	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
191.80	0.40	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	MASSIVE, GREY. DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
192.41	0.61	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
192.48	0.07	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
192.67	0.19	100		95% MUDSTONE 5% COAL	GREY. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
192.90	0.23	100		80% MUDSTONE 20% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
193.15	0.25	100		85% CARBONACEOUS MUDSTONE 15% COAL	SILTSTONE, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.19	0.04	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.23	0.04	100		55% MUDSTONE 45% COAL	FRAGMENTS, PELLETAL, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.50	0.27	100		80% COAL, DULL 20% COAL, HEAVY DULL	GRADING TO, HEAVY DULL COAL, BLACK. GRADING TO, COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
193.52	0.02	100		100% MUDSTONE	BANDS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.62	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.63	0.01	100		100% MUDSTONE	BANDS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
193.89	0.26	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
193.91	0.02	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.05	0.14	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.12	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.25	0.13	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.28	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.53	0.25	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
194.87	0.34	100		75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.88	0.01	100		100% MUDSTONE	BANDS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
194.98	0.10	100		60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 40% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
195.03	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
195.07	0.04	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BROWN-BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
195.19	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
195.42	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.62	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
196.32	0.70	100		90% MUDSTONE 10% MUDSTONE	GREY. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
196.80	0.48	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
197.25	0.45	100		95% SANDSTONE,FINE GRAINED 5% COAL	MASSIVE, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
198.20	0.95	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
198.32	0.12	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
198.58	0.26	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, SLIGHT PERMIABILITY.
198.70	0.12	100		100% CLAYSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
198.87	0.17	100		95% COAL, HEAVY DULL 5% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
198.96	0.09	100		85% MUDSTONE 10% COAL 5% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY. FRAGMENTS, STREAKS, BLACK. BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
199.01	0.05	100		100% CLAYSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
199.23	0.22	100		75% CARBONACEOUS MUDSTONE 15% MUDSTONE 10% COAL	BLACK. BANDS, LIGHT BROWN. STREAKS, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
199.36	0.13	100		90% COAL, INTERBANDED DULL AND BRIGHT 10% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
199.41	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
201.90	2.49	100		90% MUDSTONE 10% SILTSTONE	MASSIVE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
202.83	0.93	100		60% MUDSTONE 30% SILTSTONE 10% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY. BANDS, LAMINAE, GREY. LAMINAE, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
203.85	1.02	100		75% SANDSTONE,FINE GRAINED 15% SILTSTONE 10% MUDSTONE	INTERCALATIONS, SILTSTONE, LIGHT GREY. BANDS, LAMINAE, GREY. LAMINAE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
204.55	0.70	100		75% MUDSTONE 20% SILTSTONE 5% SANDSTONE,FINE GRAINED	GREY. GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
206.00	1.45	100		90% MUDSTONE 10% SILTSTONE	MASSIVE, GREY. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
206.12	0.12	100		95% MUDSTONE 5% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
207.10	0.98	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
207.53	0.43	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
211.20	3.67	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

TOP OF DALMAYNE B : 254.90 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
211.26	0.06	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE	BANDS, BROWN. MED.-FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
212.33	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
212.40	0.07	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BANDS, BROWN-BLACK. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
212.68	0.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
212.74	0.06	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. BANDS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
212.80	0.06	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
212.90	0.10	100		60% MUDSTONE 30% CARBONACEOUS MUDSTONE 10% TONSTEIN	GREY. BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
213.08	0.18	100		75% COAL, DULL WITH FEW BRIGHT BANDS 25% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
213.32	0.24	100		80% CARBONACEOUS MUDSTONE 15% CARBONACEOUS MUDSTONE 5% MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK. BRIGHT COAL, STREAKS, BLACK. BANDS, LENSES, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
213.37	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
214.02	0.65	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
214.07	0.05	100		95% CLAYSTONE 5% COAL	WHITE. BANDS, BLACK. UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
214.22	0.15	100		65% CARBONACEOUS MUDSTONE 25% MUDSTONE 10% COAL	CARBONACEOUS, DARK GREY. BANDS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
214.24	0.02	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
214.27	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.37	0.10	100		70% MUDSTONE 30% CLAYSTONE	CARBONACEOUS, GREY. WHITE. UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
214.43	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
214.67	0.24	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
214.74	0.07	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, BLACK. BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
214.95	0.21	100		90% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BLACK. STREAKS, BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
215.35	0.40	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, DARK GREY. SILTSTONE, STREAKS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
215.39	0.04	100		100% MUDSTONE	BANDS, CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
215.56	0.17	100		95% MUDSTONE 5% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
215.86	0.30	100		85% MUDSTONE 15% MUDSTONE	BRIGHT COAL, STREAKS, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
216.25	0.39	100		70% MUDSTONE 30% MUDSTONE	MASSIVE, GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
216.52	0.27	100		75% MUDSTONE 25% SILTSTONE	CARBONACEOUS, DARK GREY. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
216.78	0.26	100		50% CARBONACEOUS MUDSTONE 30% MUDSTONE 20% MUDSTONE	BLACK. CARBONACEOUS, SILTSTONE, GREY-BROWN. BANDS, STREAKS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
216.87	0.09	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
217.10	0.23	100		75% CARBONACEOUS MUDSTONE 20% MUDSTONE 5% MUDSTONE	BLACK. CARBONACEOUS, GREY-BROWN. BANDS, STREAKS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
217.45	0.35	100		75% MUDSTONE 20% MUDSTONE 5% TONSTEIN	SILTSTONE, GREY. CARBONACEOUS, BANDS, DARK GREY. BANDS, CREAM. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
217.53	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
217.55	0.02	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
217.60	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
217.65	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
217.76	0.11	100		80% CARBONACEOUS MUDSTONE 15% COAL, HEAVY DULL 5% MUDSTONE	BLACK. BLACK. BANDS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
217.82	0.06	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
217.95	0.13	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.06	0.11	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.09	0.03	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.15	0.06	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.38	0.23	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.47	0.09	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
218.55	0.08	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
218.77	0.22	100		75% SILTSTONE 25% MUDSTONE	TONSTEIN, BANDS, GREY. BANDS, CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
218.90	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
219.01	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
219.27	0.26	100		90% MUDSTONE 10% MUDSTONE	TUFFACEOUS, LIGHT BROWN. CARBONACEOUS, BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
219.38	0.11	100		95% CARBONACEOUS MUDSTONE 5% COAL	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.43	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.52	0.09	100		80% CARBONACEOUS MUDSTONE 15% COAL 5% MUDSTONE	BLACK. BANDS, STREAKS, BLACK. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.69	0.17	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.70	0.01	100		100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.77	0.07	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
219.90	0.13	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
219.97	0.07	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
220.01	0.04	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.18	0.17	100		85% MUDSTONE 15% CARBONACEOUS MUDSTONE	TUFFACEOUS, CREAM. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.29	0.11	100		95% CARBONACEOUS MUDSTONE 5% COAL	BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.31	0.02	100		100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.36	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
220.37	0.01	100		100% MUDSTONE	BANDS, TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.47	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
220.82	0.35	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
220.91	0.09	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
221.06	0.15	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
221.12	0.06	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
221.30	0.18	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
221.37	0.07	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
			BASE OF DALMAYNE B : THICKNESS= 10.17 M; SAMPLED THICKNESS= 0.06 M		
221.46	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
221.50	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
221.90	0.40	100		60% SILTSTONE 20% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY. LIGHT GREY. BANDS, CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
222.11	0.21	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
222.30	0.19	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
222.42	0.12	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
222.56	0.14	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
222.77	0.21	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
223.07	0.30	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT NON PLANAR, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
223.21	0.14	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
223.33	0.12	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
223.50	0.17	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
224.50	1.00	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.00	0.50	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
225.35	0.35	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
225.95	0.60	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
228.00	2.05	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	COALY, LAMINAE, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
229.00	1.00	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	COALY, LAMINAE, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
229.18	0.18	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	COALY, LAMINAE, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
229.76	0.58	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	COALY, FRAGMENTS, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
230.60	0.84	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. STREAKS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
231.11	0.51	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
231.30	0.19	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
231.60	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
232.08	0.48	100		90% SANDSTONE,FINE GRAINED 10% COAL	CARBONACEOUS, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
232.12	0.04	100		100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
232.31	0.19	100		50% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE 20% MUDSTONE	LIGHT GREY. COALY, STREAKS, BLACK. BANDS, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
232.60	0.29	100		70% SANDSTONE,FINE GRAINED 15% CARBONACEOUS MUDSTONE 15% MUDSTONE	LIGHT GREY. FRAGMENTS, LENSES, BLACK. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
232.96	0.36	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
233.05	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
233.12	0.07	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	FRAGMENTS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
233.46	0.34	100		75% MUDSTONE 20% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	FRAGMENTS, PELLETAL, GREY. LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
234.83	1.37	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
234.92	0.09	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
235.07	0.15	100		95% SANDSTONE 5% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
235.16	0.09	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
235.28	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
235.40	0.12	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
235.82	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
236.42	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
236.89	0.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
237.10	0.21	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
239.08	1.98	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
240.17	1.09	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
240.42	0.25	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
241.03	0.61	100		80% SANDSTONE,FINE GRAINED 20% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
241.23	0.20	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
242.28	1.05	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
242.34	0.06	100		100% CARBONACEOUS MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
242.80	0.46	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
244.26	1.46	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
245.66	1.40	100		60% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE 10% COAL	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
246.62	0.96	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
252.58	5.96	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
				TOP OF DALMAYNE C : 213.52 M R.L.	
253.20	0.62	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
253.36	0.16	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
253.41	0.05	0		CORE LOSS	
253.43	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
253.51	0.08	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
253.60	0.09	100		100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
253.62	0.02	100		60% COAL, DULL 40% CARBONACEOUS MUDSTONE	BLACK. FRAGMENTS, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
253.87	0.25	100		55% COAL, DULL 40% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
253.89	0.02	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
254.10	0.21	100		95% CARBONACEOUS MUDSTONE 5% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
254.13	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
254.55	0.42	100		60% CARBONACEOUS MUDSTONE 25% MUDSTONE 15% MUDSTONE	BLACK. TUFFACEOUS, CREAM. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
254.56	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE C : THICKNESS= 1.98 M; SAMPLED THICKNESS= 0.00 M	
254.98	0.42	100		75% MUDSTONE 25% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
255.50	0.52	100		100% MUDSTONE	SILTSTONE, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
256.80	1.30	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
257.68	0.88	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
258.00	0.32	100		70% MUDSTONE 30% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
258.70	0.70	100		85% MUDSTONE 15% SILTSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
259.10	0.40	100		85% MUDSTONE 15% SILTSTONE	MASSIVE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
259.64	0.54	100		70% MUDSTONE 30% SILTSTONE	MASSIVE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
[illegible].10	1.46	100		60% SILTSTONE 40% MUDSTONE	DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
261.46	0.36	100		70% MUDSTONE 30% SILTSTONE	GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
261.55	0.09	100		100% CLAYSTONE	LIGHT GREEN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
261.71	0.16	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
262.08	0.37	100		75% MUDSTONE 25% SILTSTONE	GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
262.26	0.18	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
263.00	0.74	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
263.80	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
264.20	0.40	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
265.60	1.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
268.60	3.00	50		55% SANDSTONE,MEDIUM GRAINED 45% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY. COALY, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
270.36	1.76	100		80% SANDSTONE,FINE GRAINED 15% COAL 5% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LAMINAE, BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., SLIGHT PERMIABILITY.
270.53	0.17	100		50% SANDSTONE,MEDIUM GRAINED 35% SANDSTONE,FINE GRAINED 15% MUDSTONE	LIGHT GREY. LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
270.79	0.26	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
272.34	1.55	100		70% SANDSTONE,MEDIUM GRAINED 25% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
273.52	1.18	100		55% SANDSTONE,MEDIUM GRAINED 45% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
274.20	0.68	100		75% SANDSTONE,MEDIUM GRAINED 20% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
274.38	0.18	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
274.67	0.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
274.87	0.20	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
275.91	1.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
276.14	0.23	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
276.81	0.67	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
277.11	0.30	100		85% SANDSTONE 15% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
277.17	0.06	100		80% SANDSTONE,FINE GRAINED 20% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
277.65	0.48	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
277.68	0.03	100		100% CARBONACEOUS MUDSTONE	FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
280.31	2.63	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
280.47	0.16	100		95% MUDSTONE 5% SANDSTONE	GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
280.55	0.08	100		70% SANDSTONE 30% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
280.66	0.11	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
281.18	0.52	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
281.32	0.14	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
281.37	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
281.47	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
281.55	0.08	100		75% SANDSTONE,MEDIUM GRAINED 25% SILTSTONE	LIGHT GREY. FRAGMENTS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
281.86	0.31	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
282.08	0.22	100		55% SANDSTONE,FINE GRAINED 45% SILTSTONE	LIGHT GREY. FRAGMENTS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
282.83	0.80	100		90% SILTSTONE 10% SANDSTONE,MEDIUM GRAINED	GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, SLIGHT PERMIABILITY.
283.00	0.12	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	LIGHT GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
283.04	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
283.82	0.78	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
283.94	0.12	100		75% SANDSTONE,FINE GRAINED 25% COAL	LIGHT GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
284.63	0.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
284.72	0.09	100		55% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,FINE GRAINED 15% COAL	LIGHT GREY. LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
287.15	2.43	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
288.18	1.03	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LIGHT GREY. WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
289.88	1.70	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
291.15	1.27	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
291.34	0.19	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
291.92	0.58	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
292.70	0.78	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
293.25	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
293.50	0.25	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
293.73	0.23	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
294.08	0.35	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
294.25	0.17	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
295.45	1.20	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
295.60	0.15	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
295.88	0.28	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
296.28	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
296.40	0.12	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
297.18	0.78	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
297.66	0.48	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
298.10	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
299.50	1.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT NON PLANAR, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
300.90	1.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
301.82	0.92	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. LIGHT GREY. WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
308.54	6.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
308.66	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
309.90	1.24	100		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
311.06	1.16	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
311.41	0.35	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY-GREEN. FRAGMENTS, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
311.58	0.17	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	FRAGMENTS, GREY-GREEN. GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
311.76	0.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
312.52	0.76	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
312.61	0.09	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
312.71	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
313.25	0.54	100		65% MUDSTONE 30% MUDSTONE 5% COAL	GREY. CARBONACEOUS, BANDS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
313.61	0.36	100		80% MUDSTONE 15% MUDSTONE 5% COAL	GREY. CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
313.63	0.02	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
313.95	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
314.21	0.26	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, GREY. LENSES, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
314.49	0.28	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
				TOP OF DALMAYNE D UPPER : 151.61 M R.L.	
314.62	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
314.65	0.03	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
314.78	0.13	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D UPPER : THICKNESS= 0.29 M; SAMPLED THICKNESS= 0.00 M	
314.99	0.21	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
315.59	0.60	100		75% MUDSTONE 25% MUDSTONE	SILTSTONE, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
316.02	0.43	100		55% MUDSTONE 45% CLAYSTONE	COALY, STREAKS, GREY. GREY. UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, RAPID SLAKING, SLIGHT PERMIABILITY.
316.15	0.13	100		90% CARBONACEOUS MUDSTONE 10% COAL, DULL	BRIGHT COAL, STREAKS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
316.55	0.40	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
316.63	0.08	100		100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
316.78	0.15	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
317.04	0.26	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
317.30	0.26	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
317.67	0.37	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
317.80	0.13	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
318.27	0.47	100		60% MUDSTONE 40% SILTSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
318.58	0.31	100		60% MUDSTONE 40% SILTSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
318.95	0.37	100		60% SILTSTONE 30% MUDSTONE 10% CARBONACEOUS MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY. BANDS, GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
319.18	0.23	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
319.72	0.54	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
320.30	0.58	100		85% SANDSTONE,FINE GRAINED 15% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
320.37	0.07	100		55% SANDSTONE,FINE GRAINED 45% COAL	LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
321.25	0.88	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
321.97	0.72	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
322.33	0.36	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, EFFECTIVELY IMPERMIABLE.
324.25	1.92	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
324.48	0.23	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
325.04	0.56	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
328.90	3.86	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
330.23	1.33	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. STREAKS, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
330.41	0.18	100		55% SANDSTONE,FINE GRAINED 45% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., EFFECTIVELY IMPERMIABLE.
330.94	0.53	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
331.04	0.10	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
331.60	0.56	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
331.72	0.12	100	105T1	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
331.85	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
332.10	0.25	100		70% SANDSTONE,FINE GRAINED 25% COAL 5% COAL, BRIGHT	LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
332.25	0.15	100	105T2	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, EFFECTIVELY IMPERMIABLE.
332.25	0.00	100	10512	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SLIGHT PERMIABILITY.
				TOP OF DALMAYNE D LOWER : 133.85 M R.L.	
332.26	0.01	100	105A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.33	0.07	100	105A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.44	0.11	100	105A1	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.47	0.03	100	105A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
332.52	0.05	100	105A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.53	0.01	100	105A1	60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 40% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.56	0.03	100	105A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.57	0.01	100	105A1	80% COAL, DULL 20% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.61	0.04	100	105A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.77	0.16	100	105A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.79	0.02	100	105A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.82	0.03	100	105A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.90	0.08	100	105A1	85% COAL, MID LUSTROUS - BRIGHT 15% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.94	0.04	100	105A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
332.96	0.02	100	105A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
333.07	0.11	100	105A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.20	0.13	100	105A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.21	0.01	100	105A1	60% COAL, BRIGHT 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.22	0.01	100	105A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.23	0.01	100	105A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.25	0.02	100	105A1	75% COAL, MID LUSTROUS - BRIGHT 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
333.33	0.08	100	105A1	80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	COALY, BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
333.34	0.01	100	105A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
333.43	0.09	100	105A2	85% MUDSTONE 15% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY. DARK GREY. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
333.56	0.13	100	105T3	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
333.56	0.00	100	105A2	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLOW SLAKING, SLIGHT PERMIABILITY.
333.67	0.11	100	105A2	90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. LENSES, STREAKS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
333.76	0.09	100	105A2	60% MUDSTONE 40% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
333.86	0.10	100	105A2	100% CLAYSTONE	DARK GREEN, WITH STREAKS OF CALCITE, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
333.89	0.03	100	105A3	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.93	0.04	100	105A3	60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.97	0.04	100	105A3	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
333.98	0.01	100	105A3	100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.01	0.03	100	105A3	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.04	0.03	100	105A3	60% MUDSTONE 40% MUDSTONE	GREY. CARBONACEOUS, COALY, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.08	0.04	100	105A4	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.09	0.01	100	105A4	55% CARBONACEOUS MUDSTONE 45% MUDSTONE	BANDS, BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.13	0.04	100	105A4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
334.18	0.05	100	105A4	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.19	0.01	100	105A4	60% COAL, DULL WITH FEW BRIGHT BANDS 25% MUDSTONE 15% COAL, BRIGHT	BLACK. LENSES, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.22	0.03	100	105A4	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.23	0.01	100	105A4	55% COAL, BRIGHT 45% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.25	0.02	100	105A4	60% COAL, MID LUSTROUS 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.34	0.09	100	105A4	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.35	0.01	100	105A4	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.36	0.01	100	105A5	45% TONSTEIN 30% COAL, MID LUSTROUS 25% CARBONACEOUS MUDSTONE	BANDS, GREY-BROWN. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.38	0.02	100	105A5	90% TONSTEIN 10% COAL	CLAYSTONE, CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.42	0.04	100	105A6	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.45	0.03	100	105A6	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.46	0.01	100	105A6	60% COAL, MID LUSTROUS - DULL 40% CLAYSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.47	0.01	100	105A6	80% COAL, MID LUSTROUS 20% CLAYSTONE	BRIGHT COAL, STREAKS, BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.72	0.25	100	105A6	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.73	0.01	100	105A6	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
334.74	0.01	100	105A6	60% TONSTEIN 40% COAL, DULL	BANDS, LIGHT GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.83	0.09	100	105A6	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.84	0.01	100	105A6	100% MUDSTONE	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.85	0.01	100	105A6	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.86	0.01	100	105A6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.89	0.03	100	105A6	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.90	0.01	100	105A6	85% COAL, DULL 15% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.92	0.02	100	105A6	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.93	0.01	100	105A6	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.94	0.01	100	105A6	90% MUDSTONE 10% COAL, BRIGHT	BANDS, CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.97	0.03	100	105A6	75% COAL, INTERBANDED DULL AND BRIGHT 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
334.99	0.02	100	105A6	55% COAL, BRIGHT 40% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BANDS, BLACK. BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.09	0.10	100	105A6	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.13	0.04	100	105A6	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.19	0.06	100	105A6	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.20	0.01	100	105A6	60% COAL, BRIGHT 40% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
335.22	0.02	100	105A6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.23	0.01	100	105A6	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.24	0.01	100	105A6	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.25	0.01	100	105A6	55% MUDSTONE 45% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.27	0.02	100	105A6	75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 25% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
335.28	0.01	100	105A6	100% MUDSTONE	CARBONACEOUS, GREY, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
335.32	0.04	100	105A6	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
335.33	0.01	100	105A6	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.36	0.03	100	105A6	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.37	0.01	100	105A6	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.39	0.02	100	105A6	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.40	0.01	100	105A6	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.43	0.03	100	105A6	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.45	0.02	100	105A6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.46	0.01	100	105A6	50% COAL, BRIGHT 50% COAL, MID LUSTROUS	BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
335.54	0.08	100	105A6	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.55	0.01	100	105A6	75% COAL, BRIGHT 25% COAL, MID LUSTROUS	BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.56	0.01	100	105A6	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.58	0.02	100	105A6	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.63	0.05	100	105A6	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.64	0.01	100	105A7	55% CARBONACEOUS MUDSTONE 45% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
335.81	0.17	100	105A7	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
335.96	0.15	100	105T4	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
335.96	0.00	100	105A7	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.04	0.08	100	105A7	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.38	0.34	100	105A8	75% COAL, HEAVY DULL 25% COAL, CANNEL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.40	0.02	100	105A9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.45	0.05	100	105A9	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.46	0.01	100	105A9	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.48	0.02	100	105A9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.54	0.06	100	105A9	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.58	0.04	100	10510	100% TONSTEIN	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.62	0.04	100	10511	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
336.64	0.02	100	10511	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.66	0.02	100	10511	60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.69	0.03	100	10511	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.76	0.07	100	10511	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.77	0.01	100	10511	100% CLAYSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.81	0.04	100	10511	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.96	0.15	100	10511	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
336.99	0.03	100	10511	60% COAL, BRIGHT 40% COAL, MID LUSTROUS	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.09	0.10	100	10511	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.10	0.01	100	10511	75% COAL, BRIGHT 25% MUDSTONE	CALCITIC, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.13	0.03	100	10511	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.14	0.01	100	10511	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.16	0.02	100	10511	60% MUDSTONE 40% COAL, BRIGHT	BRIGHT COAL, STREAKS, GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.22	0.06	100	10511	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.23	0.01	100	10511	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.36	0.13	100	10511	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.38	0.02	100	10511	95% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
337.49	0.11	100	10511	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.50	0.01	100	10511	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF DALMAYNE D LOWER : THICKNESS= 5.25 M; SAMPLED THICKNESS= 5.25 M	
337.52	0.02	100	10512	100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.60	0.08	100	10512	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
337.74	0.14	100	105T5	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.88	0.14	100	105T6	80% SANDSTONE 20% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
337.93	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
338.27	0.34	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
338.70	0.43	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
339.00	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
339.27	0.27	100		60% SANDSTONE,FINE GRAINED 40% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
339.61	0.34	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	LIGHT GREY. BANDS, FRAGMENTS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
339.90	0.29	100		50% SILTSTONE 35% SANDSTONE,FINE GRAINED 15% MUDSTONE	DARK GREY. BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
340.00	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
340.03	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
340.21	0.18	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
340.50	0.29	100		100% MUDSTONE	FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
340.52	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
340.65	0.13	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
340.69	0.04	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
340.78	0.09	100		60% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL 15% MUDSTONE	BLACK. BRIGHT COAL, STREAKS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
341.03	0.25	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
341.10	0.07	100		80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
341.14	0.04	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	COALY, STREAKS, CREAM. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
341.16	0.02	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
341.25	0.09	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
341.45	0.20	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
341.75	0.30	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
342.35	0.60	100		55% MUDSTONE 30% MUDSTONE 15% SANDSTONE,FINE GRAINED	GREY. SILTSTONE, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
342.60	0.25	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, INFILLED WITH CLAY & TALC, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
342.70	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
343.15	0.45	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
343.42	0.27	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
343.63	0.21	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
343.67	0.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
343.91	0.24	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
344.50	0.59	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
345.73	1.23	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
346.01	0.28	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
346.05	0.04	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
346.60	0.55	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DB	0.00 M	211.20 - 221.37 M	10.17 M
DC	0.00 M	252.58 - 254.56 M	1.98 M
DDU	0.00 M	314.49 - 314.78 M	0.29 M
DDL	5.25 M	332.25 - 337.50 M	5.25 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
105T1	331.60 - 331.72 M	0.12 M
105T2	332.10 - 332.25 M	0.15 M
10512	332.25 - 332.25 M	0.00 M
105A1	332.25 - 333.34 M	1.09 M
105A2	333.34 - 333.43 M	0.09 M
105T3	333.43 - 333.56 M	0.13 M
105A2	333.56 - 333.86 M	0.30 M
105A3	333.86 - 334.04 M	0.18 M
105A4	334.04 - 334.35 M	0.31 M
105A5	334.35 - 334.38 M	0.03 M
105A6	334.38 - 335.63 M	1.25 M
105A7	335.63 - 335.81 M	0.18 M
105T4	335.81 - 335.96 M	0.15 M
105A7	335.96 - 336.04 M	0.08 M
105A8	336.04 - 336.38 M	0.34 M
105A9	336.38 - 336.54 M	0.16 M
10510	336.54 - 336.58 M	0.04 M
10511	336.58 - 337.50 M	0.92 M
10512	337.50 - 337.60 M	0.10 M
105T5	337.60 - 337.74 M	0.14 M
105T6	337.74 - 337.88 M	0.14 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY DRA

HOLE TYPE	
EASTING	599,780 M AH GRID
NORTHING	5,374,969 M AH GRID
ELEVATION	97.50 M
TOTAL DEPTH DRILLED	2.82 M
DRILLING STARTED	01/02/82
DRILLING TIME	02 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.01	0.01			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL.
			TOP OF DALMAYNE D LOWER : 97.49 M R.L.		
0.26	0.25		DRA03	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.30	0.04		DRA03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.32	0.02		DRA03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.34	0.02		DRA03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.36	0.02		DRA04	50% TONSTEIN 50% CARBONACEOUS MUDSTONE	LIGHT BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
0.37	0.01		DRA04	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.40	0.03		DRA04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.41	0.01		DRA04	60% CARBONACEOUS MUDSTONE 40% TONSTEIN	BROWN-BLACK. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
0.47	0.06		DRA04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.48	0.01		DRA04	90% COAL, DULL WITH FEW BRIGHT BANDS 10% TONSTEIN	BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
0.49	0.01		DRA04	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.54	0.05		DRA04	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.66	0.12		DRA04	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.69	0.03		DRA04	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.77	0.08		DRA05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.79	0.02		DRA05	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
0.88	0.09		DRA05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
0.89	0.01		DRA05	95% COAL, BRIGHT 5% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
1.01	0.12		DRA05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.02	0.01		DRA05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.03	0.01		DRA05	80% COAL, BRIGHT 20% TONSTEIN	BANDS, BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
1.06	0.03		DRA05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.09	0.03		DRA05	90% TONSTEIN 10% COAL, BRIGHT	CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
1.12	0.03		DRA05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.14	0.02		DRA05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.16	0.02		DRA05	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
1.26	0.10		DRA06	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
1.27	0.01		DRA06	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
1.29	0.02		DRA07	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.30	0.01		DRA07	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.33	0.03		DRA07	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.36	0.03		DRA07	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.52	0.16		DRA07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.53	0.01		DRA07	50% TONSTEIN 50% COAL, MID LUSTROUS	LIGHT BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
1.58	0.05		DRA08	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.67	0.09		DRA08	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.68	0.01		DRA08	60% MUDSTONE 40% COAL, DULL WITH NUMEROUS BRIGHT BANDS	LIGHT BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
1.70	0.02		DRA08	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.72	0.02		DRA08	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
1.74	0.02		DRA08	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
1.82	0.08		DRA08	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.85	0.03		DRA08	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.88	0.03		DRA08	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
1.93	0.05		DRA09	80% MUDSTONE 20% COAL, BRIGHT	CARBONACEOUS, DARK BROWN. BANDS, BLACK. UNWEATHERED, WEAK ROCK.
1.97	0.04		DRA09	65% CARBONACEOUS MUDSTONE 35% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
2.01	0.04		DRA10	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
2.23	0.22		DRA10	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.24	0.01		DRA10	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.31	0.07		DRA10	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.32	0.01		DRA10	60% MUDSTONE 40% COAL, MID LUSTROUS	BANDS, LIGHT BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
2.34	0.02		DRA10	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.36	0.02		DRA10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.39	0.03		DRA11	100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
2.45	0.06		DRA11	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.50	0.05		DRA11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
2.52	0.02		DRA11	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
				BASE OF DALMAYNE D LOWER : THICKNESS= 2.51 M; SAMPLED THICKNESS= 2.51 M	
2.82	0.30			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DDL	2.51 M	0.01 - 2.52 M	2.51 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
DRA03	0.01 - 0.34 M	0.33 M
DRA04	0.34 - 0.69 M	0.35 M
DRA05	0.69 - 1.16 M	0.47 M
DRA06	1.16 - 1.27 M	0.11 M
DRA07	1.27 - 1.53 M	0.26 M
DRA08	1.53 - 1.88 M	0.35 M
DRA09	1.88 - 1.97 M	0.09 M
DRA10	1.97 - 2.36 M	0.39 M
DRA11	2.36 - 2.52 M	0.16 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY DRA1

HOLE TYPE	
EASTING	599,780 M AM GRID
NORTHING	5,374,969 M AM GRID
ELEVATION	97.50 M
TOTAL DEPTH DRILLED	2.82 M
DRILLING STARTED	01/02/82
DRILLING TIME	02 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY DRA1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CHIP DESCRIPTION ***
2.52	2.51		DRA1	100% COAL	BLACK.

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
DRA1	0.01 - 2.52 M	2.51 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY DRA2

HOLE TYPE	
EASTING	599,780 M AH GRID
NORTHING	5,374,969 M AH GRID
ELEVATION	97.50 M
TOTAL DEPTH DRILLED	2.82 M
DRILLING STARTED	01/02/82
DRILLING TIME	02 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

BOREHOLE : GY DRA2 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CHIP DESCRIPTION ***
2.52	2.51		DRA2	100% COAL	BLACK.

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
DRA2	0.01 - 2.52 M	2.51 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

963 546

HOLE TYPE	CORE	
EASTING	596,480 M	GRID
NORTHING	5,354,800 M	GRID
ELEVATION	20.00 M	
TOTAL DEPTH DRILLED	47.00 M	
DRILLING STARTED	1/ 1/01	
DRILLING TIME		
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :		

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : 963 546 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** NO ***	GEOLOGICAL DESCRIPTION

*** ERROR *** : NO CL RECORDS ON FILE

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THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

986620

HOLE TYPE	CORE	
EASTING	598,400 M	GRID
NORTHING	5,361,680 M	GRID
ELEVATION	300.00 M	
TOTAL DEPTH DRILLED	351.76 M	
DRILLING STARTED	1/ 1/01	
DRILLING TIME		
CORE SIZE	33.5 MM	
HOLE SIZE	59.9 MM	
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		

INFORMATION AVAILABLE : LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
11.00	11.00	0		CORE LOSS	NOTE: START OF BQ CORE
13.10	2.10	64		100% DOLERITE	MED.-FINE GRAINED, GREY, MODERATELY WEATHERED, MODERATELY SPACED JOINTS. NOTE: JOINT DIPS VARY FROM 60 TO 90
13.28	0.18	66		100% DOLERITE	SANDSTONE, BAKED, GREY, MODERATELY WEATHERED. NOTE: TRANSITION ZONE FROM DOLERITE TO HORNFELS SANDSTONE
14.14	0.86	62		100% SANDSTONE	BAKED, GREY-BROWN, MODERATELY WEATHERED, EXTREMELY CLOSELY SPACED JOINTS.
14.45	0.31	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED. NOTE: JOINTS SUBVERTICAL
14.50	0.05	84		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, GREY, MODERATELY WEATHERED.
14.64	0.14	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED.
14.69	0.05	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, JOINTS DIP 45 DEG.
14.77	0.08	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED.
14.79	0.02	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, JOINTS DIP 45 DEG.
15.36	0.57	84		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED.
15.41	0.05	84		100% SILTSTONE	PEBBLY, GREY, MODERATELY WEATHERED.
16.04	0.63	84		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, MODERATELY WEATHERED, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG.
19.62	3.58	51		100% DOLERITE	FINE GRAINED, BROWN, MODERATELY WEATHERED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
21.98	2.36	95		100% SANDSTONE,MEDIUM GRAINED	GREY, MODERATELY WEATHERED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG.
22.56	0.58	95		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED.
23.15	0.59	95		100% PEBBLE CONGLOMERATE	QUARTZITIC, WHITE, UNWEATHERED, BEDS DIP 20 DEG.
23.28	0.13	0		CORE LOSS	
24.38	1.10	95		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, SHEARING AT BEDDING SEPARATION SURFACE.
25.18	0.80	13		100% SANDSTONE,COARSE GRAINED	PEBBLY, UNWEATHERED.
26.50	1.32	19		100% COBBLE CONGLOMERATE	SANDSTONE, LIGHT BROWN, UNWEATHERED.
32.50	6.00	2		100% COBBLE CONGLOMERATE	QUARTZITIC, ARGILLACEOUS, LIGHT BROWN, UNWEATHERED.
36.36	3.86	86		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED.
36.82	0.46	86		100% SILTSTONE	BADLY BROKEN, GREY-GREEN, UNWEATHERED.
37.58	0.76	86		100% SANDSTONE,MEDIUM GRAINED	COALY, GREY, UNWEATHERED.
38.50	0.92	86		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
38.69	0.19	0		CORE LOSS	
39.52	0.83	0		CORE LOSS	
40.82	1.30	23		100% MUDSTONE	BADLY BROKEN, SHALY, GREY, UNWEATHERED.
42.52	1.70	43		100% SANDSTONE,FINE GRAINED	BAKED, LIGHT BROWN, UNWEATHERED, JOINTS DIP 45 DEG. NOTE: SILTSTONE AT TOP OF UNIT CORE BROKEN OVER BASAL 25CM
59.19	16.67	100		100% DOLERITE	FINE GRAINED, GREY. NOTE: JOINTS OCCUR IN SETS
59.44	0.25	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED.
60.00	0.56	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
60.96	0.96	58		100% SILTSTONE	SHALY, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG.
61.25	0.29	100		100% MUDSTONE	CARBONACEOUS, LIGHT GREY, UNWEATHERED, WITH PLANT REMAINS.
61.27	0.02	100		100% MUDSTONE	SHALY, CREAM, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
61.54	0.27			70% SILTSTONE 30% COAL, BRIGHT	CARBONACEOUS, BLACK.
61.84	0.30	70		50% COAL, DULL 50% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, BASAL CONTACT TRANSITIONAL. NOTE: CLAYSTONE BAND FROM 6162 TO 6164CM
62.40	0.56	46		100% SILTSTONE	BADLY BROKEN, GREY, UNWEATHERED, JOINTS DIP 45 DEG., WITH SLICKENSIDES.
64.04	1.64	88		100% SILTSTONE	MICACEOUS, GREY, WITH CALCITE ON JOINTS, UNWEATHERED. NOTE: JOINT DIPS VARY FROM 60 TO 90 BASAL MUDSTONE WITH MINOR LAMINITE
64.79	0.75	87		100% TUFF	WHITE, UNWEATHERED. NOTE: IDENTIFIED AS IGNIMBRITE BY C. BACON
64.96	0.17	66		100% MUDSTONE	CARBONACEOUS, LIGHT GREY, UNWEATHERED, JOINTS DIP 85 DEG.
65.29	0.33	100		100% MUDSTONE	CARBONACEOUS, SHALY, GREY-BROWN, UNWEATHERED, WITH PLANT REMAINS.
65.40	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED.
65.45	0.05	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
65.51	0.06	100		100% MUDSTONE	CARBONACEOUS, LIGHT GREY, UNWEATHERED.
65.54	0.03	100		100% TUFF	CARBONACEOUS, LIGHT GREY, UNWEATHERED.
65.93	0.39	87		100% MUDSTONE	SHALY, MICACEOUS, GREY-GREEN, UNWEATHERED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.23	0.30	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, THINLY BEDDED, WITH SLICKENSIDES.
66.88	0.65	100		100% TUFF	BAKED, MICACEOUS, WHITE, UNWEATHERED.
67.01	0.13	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS, BLACK, UNWEATHERED, THINLY BEDDED.
67.21	0.20	30		100% CLAYSTONE	SHALY, LIGHT GREEN, UNWEATHERED, THINLY BEDDED, WITH CARBONACEOUS WISPS.
67.49	0.28	82		100% MUDSTONE	CARBONACEOUS, SHALY, GREY-BROWN, UNWEATHERED, THINLY BEDDED.
67.87	0.38	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, WITH MINOR PYRITE, UNWEATHERED.
68.45	0.58	100		100% MUDSTONE	CARBONACEOUS, ARGILLACEOUS, LIGHT BROWN, UNWEATHERED.
68.82	0.37	54		100% COAL, BRIGHT	BADLY BROKEN, MUDSTONE, BLACK, UNWEATHERED, THINLY BEDDED, WITH PLANT REMAINS.
69.48	0.66	100		100% SILTSTONE	MUDSTONE, LAMINAE, LIGHT BROWN, UNWEATHERED, THINLY BEDDED, WITH PLANT REMAINS.
69.85	0.37	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED.
70.13	0.28	64		100% CLAYSTONE	SHALY, MICACEOUS, LIGHT BROWN, UNWEATHERED, THINLY BEDDED.
70.56	0.43	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED.
70.94	0.38	100		100% COAL, HEAVY DULL	MUDSTONE, BRIGHT COAL, BLACK, UNWEATHERED.
71.14	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, WITH CARBONACEOUS WISPS, WITH SLICKENSIDES.
72.52	1.38	100		100% SANDSTONE,FINE GRAINED	SILTY, MICACEOUS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
73.69	1.17	93		100% MUDSTONE	SILTY, CARBONACEOUS, LIGHT GREY, UNWEATHERED, THINLY BEDDED.
73.72	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
73.97	0.25	60		100% MUDSTONE	CARBONACEOUS, LIGHT GREY, UNWEATHERED, THINLY BEDDED, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
74.12	0.15	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WITH SLICKENSIDES.
74.38	0.26	100		100% CLAYSTONE	SHALY, MICACEOUS, WHITE, WITH MINOR FELDSPAR AND MINOR BIOTITE, UNWEATHERED.
74.40	0.02	100		100% COAL, HEAVY DULL	ARGILLACEOUS, BLACK, UNWEATHERED.
75.21	0.81	7		100% MUDSTONE	HEAVY DULL COAL, BADLY BROKEN, BROWN, UNWEATHERED.
75.30	0.09	50		100% MUDSTONE	SHALY, ARGILLACEOUS, WHITE, UNWEATHERED.
75.50	0.20	75		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
75.54	0.04	100		100% MUDSTONE	CARBONACEOUS, LIGHT GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.77	0.23	100		100% COAL, HEAVY DULL	COALY, LAMINAE, BLACK, UNWEATHERED.
					NOTE: MINOR BRIGHT AND DULL COAL LAMINAE
76.04	0.27	63		100% COAL, DULL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
76.30	0.26	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, BEDS DIP 10 DEG.
76.40	0.10	100		100% COAL, HEAVY DULL	CALCITIC, BLACK, UNWEATHERED.
76.42	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED.
76.76	0.34	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
76.92	0.16	100		100% CLAYSTONE	SHALY, WHITE, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
77.09	0.17	100		100% MUDSTONE	GRADING TO, DULL COAL, DARK BROWN, UNWEATHERED.
77.25	0.16	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, WITH CALCITE ON CLEAT AND KAOLINITE ON CLEAT, UNWEATHERED.
77.80	0.55	100		100% MUDSTONE	SHALY, DULL COAL, DARK BROWN, WITH ABUNDANT FELDSPAR, UNWEATHERED.
78.99	1.19	87		100% COAL, HEAVY DULL	BADLY BROKEN, MUDSTONE, BLACK, UNWEATHERED, WITH SLICKENSIDES.
80.96	1.97	96		100% SHALE	GREY, UNWEATHERED, WITH SLICKENSIDES.
81.38	0.42	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
81.54	0.16	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, DARK BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
					NOTE: MINOR BRIGHT COAL LAMINAE
81.65	0.11	82		100% COAL, DULL	MUDSTONE, BANDS, BLACK, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
82.01	0.36	88		50% COAL, BRIGHT 50% MUDSTONE	CALCITIC, BADLY BROKEN, BLACK. DULL COAL, LAMINAE. WITH CALCITE ON CLEAT, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
82.09	0.08	100		50% COAL, HEAVY DULL 50% MUDSTONE	BLACK. CARBONACEOUS. UNWEATHERED, BASAL CONTACT TRANSITIONAL, VERY CLOSE JOINT SPACING, JOINTS DIP 85 DEG.
82.72	0.63	94		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, COALY, DARK BROWN. COALY, GREY-BROWN. UNWEATHERED, BASAL CONTACT TRANSITIONAL, JOINTS DIP 85 DEG.
82.80	0.08	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG., WITH SLICKENSIDES, JOINTS DIP 30 DEG.
84.48	1.68	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.91	0.43	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	SILTY, GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
86.57	1.66	97		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, GREY, WITH MUSCOVITE, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG.
89.44	2.87	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MED.-FINE GRAINED, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
96.50	7.06	98		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, COALY, DARK BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, WITH MUD PELLETS.
97.56	1.06	100		100% MUDSTONE	SHALY, ARGILLACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH SLICKENSIDES, JOINTS DIP 85 DEG.
97.76	0.20			100% CLAYSTONE	GREY-GREEN, WITH MINOR BIOTITE, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH SLICKENSIDES.
97.98	0.22	100		40% COAL, HEAVY DULL 30% CARBONACEOUS MUDSTONE 30% MUDSTONE	BLACK. GREY. UNWEATHERED, WITH PLANT REMAINS.
98.24	0.26	100		100% MUDSTONE	GRADING TO, SILTSTONE, GREY-BROWN, UNWEATHERED, WITH SLICKENSIDES.
98.48	0.24	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG.
98.69	0.21	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED.
99.12	0.43	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, LIGHT BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
99.60	0.48	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH SLICKENSIDES. NOTE: SLICKENSIDES ARE SUB-HORIZONTAL
100.95	1.35	97		100% SILTSTONE	ARGILLACEOUS, COALY, GREY-BROWN, UNWEATHERED, WITH SLICKENSIDES.
101.40	0.45	100		50% SILTSTONE 50% SANDSTONE	CARBONACEOUS, LIGHT GREY. MED.-FINE GRAINED.
103.28	1.88	93		100% SANDSTONE,MEDIUM GRAINED	COALY, WHITE, UNWEATHERED.
103.48	0.20	100		60% COAL, HEAVY DULL 40% CARBONACEOUS MUDSTONE	BLACK. UNWEATHERED.
103.51	0.03	100		100% CLAY	BADLY BROKEN, BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
103.60	0.09	100		100% CARBONACEOUS MUDSTONE	GRADING TO, MUDSTONE, GREY-BROWN, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.90	0.30	100		100% CLAYSTONE	CARBONACEOUS, MUDSTONE, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS.
104.63	0.73	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, MUDSTONE, BLACK, WITH CALCITE ON CLEAT AND KAOLINITE ON CLEAT, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
105.27	0.64	100		100% SILTSTONE	MUDSTONE, BANDS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
105.70	0.43	100		50% COAL, BRIGHT 30% COAL, DULL 20% MUDSTONE	LAMINAE, BLACK. LAMINAE, BLACK. LAMINAE, GREY. UNWEATHERED.
106.34	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 30 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
106.77	0.43	100		60% SILTSTONE 40% MUDSTONE	GRADING TO, MUDSTONE, GREY-BROWN. UNWEATHERED, BASAL CONTACT TRANSITIONAL.
109.88	3.11	15		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
110.08	0.20	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY-BROWN, UNWEATHERED, BASAL CONTACT ABRUPT.
110.18	0.10	100		100% COAL, HEAVY DULL	GRADING TO, MUDSTONE, BLACK, UNWEATHERED, BASAL CONTACT EROSIONAL.
110.29	0.11	100		100% CLAYSTONE	BROWN, UNWEATHERED.
110.50	0.21	100		100% COAL, DULL	MASSIVE, BLACK, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
110.79	0.29	100		100% COAL, HEAVY DULL	GRADING TO, MUDSTONE, BLACK, UNWEATHERED.
111.05	0.26	100		100% CLAYSTONE	CARBONACEOUS, BANDS, GREY-GREEN, UNWEATHERED.
111.39	0.34	100		80% CARBONACEOUS MUDSTONE 20% CLAYSTONE	GRADING TO, DULL COAL, DARK BROWN. BROWN. UNWEATHERED.
111.75	0.36	100		100% CLAYSTONE	GRADING TO, MUDSTONE, GREY-GREEN, UNWEATHERED, WITH SLICKENSIDES.
112.06	0.31	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
112.22	0.16	100		100% CLAYSTONE	BROWN, UNWEATHERED, WITH SLICKENSIDES.
112.45	0.23			75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BLACK.
112.55	0.10	100		100% CLAYSTONE	GREY-BROWN, UNWEATHERED, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS.
112.86	0.31	100		100% COAL, DULL	MUDSTONE, BANDS, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH MUD PELLETS, WITH SLICKENSIDES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
113.15	0.29	97		100% MUDSTONE	GRADING TO, SHALY, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
113.55	0.40	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED.
113.94	0.39	86		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	LAMINAE, GREY-BROWN. LAMINAE. UNWEATHERED, WITH CROSS LAMINATION, WITH SLICKENSIDES.
114.18	0.24	100		100% SANDSTONE,FINE GRAINED	COALY, BANDS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
116.24	2.06	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED.
126.47	10.23	98		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, MASSIVE.
126.82	0.35	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
131.75	4.93	100		100% CARBONACEOUS MUDSTONE	GRADING TO, MUDSTONE, GREY-BROWN, UNWEATHERED, WITH SLICKENSIDES.
151.96	20.21	100		100% SANDSTONE,FINE GRAINED	GRADING TO, SCREE, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS, MASSIVE.
157.49	5.53	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, GREY-BROWN, UNWEATHERED, BASAL CONTACT ABRUPT.
157.59	0.10	100		50% COAL, DULL 50% CARBONACEOUS MUDSTONE	BLACK. UNWEATHERED, BASAL CONTACT ABRUPT.
159.85	2.26	99		100% MUDSTONE	BLUE-GREY, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
168.80	8.95	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, GREY, UNWEATHERED, BEDS DIP 10 DEG.
169.74	0.94	100		100% MUDSTONE	COALY, SILTY, GREY, UNWEATHERED, WITH SLICKENSIDES.
173.65	3.91	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MASSIVE, WITH MUD PELLETS.
225.67	52.02	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. GREY. UNWEATHERED, MASSIVE, WITH CARBONACEOUS WISPS.
226.00	0.33	97		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED.
226.59	0.59	100		100% CARBONACEOUS MUDSTONE	GRADING TO, MUDSTONE, GREY-BROWN, UNWEATHERED.
227.11	0.52	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
228.00	0.89			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, UNWEATHERED.
235.33	7.33	99		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, BASAL CONTACT ABRUPT, MASSIVE, WITH SLICKENSIDES.
235.64	0.31	67		100% COAL, DULL	MUDSTONE, BANDS, BLACK, UNWEATHERED, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
236.60	0.96	58		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY, UNWEATHERED.
237.70	1.10	78		100% MUDSTONE	BLUE-GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
237.84	0.14	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
249.57	11.73	88		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, GREY, UNWEATHERED, BEDS DIP 5 DEG., MASSIVE, WITH MUD PELLETS.
250.41	0.84	98		100% MUDSTONE	SILTY, BLUE-GREY, UNWEATHERED, WITH PLANT REMAINS, WITH SLICKENSIDES.
251.44	1.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, WITH CROSS LAMINATION, JOINTS DIP 85 DEG.
251.53	0.09	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, BASAL CONTACT ABRUPT.
251.80	0.27	77		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED.
251.96	0.16			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, UNWEATHERED.
251.98	0.02	100		100% COAL, DULL	BLACK, WITH MUSCOVITE, UNWEATHERED.
252.01	0.03			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, WITH CLAY AND PYRITE, UNWEATHERED, BASAL CONTACT ABRUPT.
252.51	0.50	40		100% COAL, DULL	BADLY BROKEN, ARGILLACEOUS, BLACK, UNWEATHERED.
252.81	0.30	33		100% SANDSTONE,FINE GRAINED	BADLY BROKEN, ARGILLACEOUS, GREY-BROWN, UNWEATHERED.
270.91	18.10	99		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH MUD PELLETS.
271.21	0.30	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, BASAL CONTACT ABRUPT.
271.22	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED, BASAL CONTACT ABRUPT.
271.79	0.57	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WITH SLICKENSIDES.
271.92	0.13	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	BROWN. UNWEATHERED, BASAL CONTACT TRANSITIONAL.
272.61	0.69	100		100% MUDSTONE	GREY, WITH CALCITE, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 18 DEG.
272.72	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
274.42	1.70	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY, UNWEATHERED, WITH SLICKENSIDES.
277.00	2.58	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, WITH SLICKENSIDES.
284.42	7.42			100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
285.24	0.82	100		100% MUDSTONE	BLUE-GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
285.53	0.29	83		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED.
285.79	0.26	88		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WITH PLANT REMAINS.
285.85	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, BASAL CONTACT ABRUPT.
285.86	0.01	100		100% CARBONACEOUS MUDSTONE	CLAYSTONE, LAMINAE, GREY, UNWEATHERED, BASAL CONTACT ABRUPT.
285.91	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
286.43	0.52	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, LAMINAE, GREY-BROWN, UNWEATHERED.
289.63	3.20	95		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE	GREY. QUARTZOSE. UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
290.33	0.70	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
290.41	0.08			40% COAL, DULL 30% COAL, BRIGHT 30% CLAYSTONE	LAMINAE, BLACK. LAMINAE, BLACK. LAMINAE, WHITE. UNWEATHERED.
290.54	0.13	100		95% COAL, DULL 5% COAL, BRIGHT	BLACK. LAMINAE, BLACK. UNWEATHERED.
290.56	0.02	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED.
290.66	0.10	100		95% COAL, DULL 5% COAL, BRIGHT	BLACK. LAMINAE, BLACK. UNWEATHERED.
290.67	0.01	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED.
290.80	0.13	100		95% COAL, DULL 5% COAL, BRIGHT	BLACK. LAMINAE, BLACK. UNWEATHERED.
291.34	0.54	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH SLICKENSIDES.
291.39	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED.
291.41	0.02	100		100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED.
291.99	0.58	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, WITH PLANT REMAINS.
292.18	0.19	100		100% CLAYSTONE	LIGHT BROWN, WITH ABUNDANT CALCITE, UNWEATHERED.
				NOTE: CORE BROKEN OVER BASAL 10CM	
292.74	0.56	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, WITH BANDS OF CALCITE, UNWEATHERED, WITH SAND LINEATION.
292.95	0.21	100		100% MUDSTONE	SANDSTONE, BANDS, GREY-BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
293.63	0.68	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, UNWEATHERED.
294.42	0.79	100		60% COAL, HEAVY DULL 40% COAL, DULL	COARSE GRAINED, BANDS, BLACK. MUDSTONE, BANDS, BLACK. UNWEATHERED.
296.48	2.06	67		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MASSIVE, WITH PLANT REMAINS.
296.91	0.43	100		100% COAL, DULL	HEAVY DULL COAL, BANDS, BLACK, WITH CALCITE ON CLEAT AND KAOLINITE ON CLEAT, UNWEATHERED, BASAL CONTACT ABRUPT, JOINTS DIP 85 DEG.
296.95	0.04	100		100% CARBONACEOUS SHALE	BANDS, COALY, BROWN-BLACK, UNWEATHERED.
298.17	1.22	65		100% MUDSTONE	HEAVY DULL COAL, BANDS, GREY, UNWEATHERED.
298.31	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED.
299.80	1.49	100		100% MUDSTONE	HEAVY DULL COAL, BANDS, GREY, UNWEATHERED, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
300.45	0.65	92		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
300.70	0.25	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, WITH SLICKENSIDES.
300.85	0.15	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, BASAL CONTACT ABRUPT.
301.59	0.74	100		100% MUDSTONE	GRADING TO, SILTSTONE, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS.
302.02	0.43	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
				NOTE: ABUNDANT	BROWN COAL CONCRETIONS
302.14	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, BASAL CONTACT ABRUPT.
302.61	0.47			80% SANDSTONE 20% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. QUARTZOSE, ARGILLACEOUS, BUFF. UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
303.69	1.08	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	LAMINAE, ARGILLACEOUS, GREY-BROWN. LAMINAE, GREY-BROWN. UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH BIOTURBIDATION.
				NOTE: ABUNDANT	BROWN CONCRETIONS
303.84	0.15	100		60% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL	GREY-BROWN. BLACK. UNWEATHERED, BASAL CONTACT TRANSITIONAL.
304.45	0.61	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	GREY-BROWN. GREY-BROWN. UNWEATHERED, BASAL CONTACT ABRUPT.
				NOTE: BROWN CONCRETIONS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
304.78	0.33	85		50% COAL, HEAVY DULL 50% CARBONACEOUS MUDSTONE	SHALY, BADLY BROKEN, BLACK. GREY-BROWN. UNWEATHERED, BASAL CONTACT TRANSITIONAL.
306.15	1.37	97		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	SANDSTONE, BANDS, GREY-BROWN. GREY. WITH ABUNDANT MUSCOVITE, UNWEATHERED, BEDS DIP 10 DEG., WITH SLICKENSIDES, JOINTS DIP 45 DEG.
310.02	3.87	98		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, CARBONACEOUS, BUFF. HEAVY DULL COAL, BANDS, GREY-BROWN.
				NOTE: MICROFAULTING FROM 30765 TO 30795CM	
310.60	0.58	100		60% MUDSTONE 40% SILTSTONE	LAMINAE, GREY-BROWN. UNWEATHERED, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION.
310.88	0.28			100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
311.63	0.75	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LAMINAE, LIGHT BROWN, UNWEATHERED.
312.58	0.95	85		60% MUDSTONE 40% SILTSTONE	GREY-BROWN. UNWEATHERED, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
				NOTE: END OF BQ CORE	
318.23	5.65	96		100% MUDSTONE	SHALY, COALY, GREY, UNWEATHERED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, WITH SAND LINEATION.
				NOTE: START OF AQ CORE	
318.31	0.08	100		100% SHALE	SILTY, DARK BROWN, UNWEATHERED.
318.71	0.40	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, BASAL CONTACT ABRUPT.
318.76	0.05	60		100% SHALE	GREY, UNWEATHERED.
321.76	3.00			70% MUDSTONE 20% SILTSTONE 10% SANDSTONE,FINE GRAINED	ARGILLACEOUS, CALCITIC, GREY-BROWN. GREY-BROWN. LIGHT BROWN.
322.36	0.60	100		100% MUDSTONE	SHALY, SILICEOUS, LIGHT BROWN, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
325.08	2.72	100		100% SANDSTONE,MEDIUM GRAINED	QUARTZOSE, CARBONACEOUS, LIGHT BROWN, UNWEATHERED, BASAL CONTACT ABRUPT, WITH BIOTURBIDATION, WITH CROSS LAMINATION.
326.46	1.38	96		100% SHALE	SILTY, SILICEOUS, GREY, WITH BANDS OF CALCITE, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
333.60	7.14	100		100% MUDSTONE	SILTY, SILICEOUS, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG., WITH CONVOLUTED BEDDING, WITH CROSS LAMINATION.
333.76	0.16	100		100% SANDSTONE	GRADING TO, QUARTZOSE, BROWN-BLACK, WITH ABUNDANT MUSCOVITE AND NODULES OF CALCITE, UNWEATHERED, WITH BIOTURBIDATION, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
334.93	1.17	100		100% SANDSTONE,COARSE GRAINED	QUARTZOSE, LIGHT GREEN, UNWEATHERED, BASAL CONTACT ABRUPT, BEDS DIP 60 DEG., WITH MUD PELLETS.
335.16	0.23	100		100% SILTSTONE	CONGLOMERATIC, SANDSTONE, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL, EXTREMELY CLOSELY SPACED JOINTS.
335.96	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, BASAL CONTACT TRANSITIONAL.
340.70	4.74	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, BASAL CONTACT ABRUPT. NOTE: ABUNDANT BROWN CONCRETIONS FROM 34019 TO 34060CM
350.63	9.93	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, SANDS, GREY-BROWN, UNWEATHERED, BEDS DIP 30 DEG., WITH CROSS LAMINATION. NOTE: IRON CONCRETIONS FROM 34251 TO 34266CM BASE OF FRESHWATER SEQUENCE OF THE UPPER PARMEENER SUPERGROUP TOP OF THE GLACIO-MARINE SEQUENCE OF THE PARMEENER SUPERGROUP.
351.76	1.13	100		100% SILTSTONE	SHALY, GREY-BROWN, WITH ABUNDANT MUSCOVITE AND BANDS OF CALCITE, UNWEATHERED. NOTE: ANGULAR QUARTZ CLASTS COMMON QUARTZITE PEBBLES, ROUNDED, AT 35151CM BASE OF HOLE AT 35176CM

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

992 637

HOLE TYPE	CORE	
EASTING	599,200 M	GRID
NORTHING	5,363,720 M	GRID
ELEVATION	80.00 M	
TOTAL DEPTH DRILLED	127.35 M	
DRILLING STARTED	1/ 1/01	
DRILLING TIME		
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :		

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : 992 637 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** NO ***	GEOLOGICAL DESCRIPTION

*** ERROR *** : NO CL RECORDS ON FILE

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

040 675

HOLE TYPE	CORE	
EASTING	604,480 M	GRID
NORTHING	5,373,240 M	GRID
ELEVATION	20.00 M	
TOTAL DEPTH DRILLED	438.05 M	
DRILLING STARTED	1/ 1/01	
DRILLING TIME		
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :		
PETROPHYSICAL WIRELINE LOGS RUN :		

BOREHOLE : 040 675 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** NO ***	GEOLOGICAL DESCRIPTION

*** ERROR *** : NO CL RECORDS ON FILE

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

045 732

HOLE TYPE	CORE	
EASTING	604,080 M	GRID
NORTHING	5,367,520 M	GRID
ELEVATION	5.00 M	
TOTAL DEPTH DRILLED	344.00 M	
DRILLING STARTED	1/ 1/01	
DRILLING TIME		
CORE SIZE		
HOLE SIZE		
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID		
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION :VAILABLE :		

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : 045 732 PAGE 1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** NO ***	GEOLOGICAL DESCRIPTION

*** ERROR *** : NO CL RECORDS ON FILE

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

LL1

HOLE TYPE	CORE
EASTING	606,700 M AM GRID
NORTHING	5,377,600 M AM GRID
ELEVATION	10.00 M
TOTAL DEPTH DRILLED	51.65 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : LL1

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
1.57	1.57	100		100% CLAY	SOIL, GREY-BROWN, MODERATELY WEATHERED.
2.49	0.92	100		100% SANDSTONE	YELLOW, UNWEATHERED.
3.40	0.91	100		100% SANDSTONE	GREEN, UNWEATHERED.
3.45	0.05	100		100% IRONSTONE	RED-BROWN, UNWEATHERED.
5.99	2.54	100		100% SANDSTONE	YELLOW-GREY, UNWEATHERED.
6.93	0.94	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: HARD AND BRITTLE
7.49	0.56	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
7.59	0.10	100		100% COAL	MUDSTONE, INTERCALATIONS, BLACK, UNWEATHERED.
					NOTE: AND BLACK CLOD
7.94	0.35	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
8.28	0.34	100		100% COAL	BLACK, UNWEATHERED.
8.31	0.03	100		100% MUDSTONE	GREY, UNWEATHERED.
8.33	0.02	100		100% COAL	BLACK, UNWEATHERED.
8.39	0.06	100		100% MUDSTONE	GREY, UNWEATHERED.
8.43	0.04	100		100% COAL	BLACK, UNWEATHERED.
8.45	0.02	100		100% MUDSTONE	GREY, UNWEATHERED.
8.52	0.07	100		100% COAL	BLACK, UNWEATHERED.
8.55	0.03	100		100% MUDSTONE	GREY, UNWEATHERED.
8.57	0.02	100		100% COAL	BLACK, UNWEATHERED.
8.59	0.02	100		100% MUDSTONE	GREY, UNWEATHERED.
8.69	0.10	100		100% COAL	BLACK, UNWEATHERED.
8.72	0.03	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED.
9.32	0.60	100		100% COAL	BLACK, UNWEATHERED.
					NOTE: VERY BRITTLE
9.40	0.08	100		100% MUDSTONE	GREY, UNWEATHERED.
10.06	0.66	100		100% CLAYSTONE	WHITE, UNWEATHERED.
11.73	1.67	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
11.79	0.06	100		100% COAL	BLACK, UNWEATHERED.
13.36	1.57	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
13.39	0.03	100		100% SANDSTONE	GREY, UNWEATHERED.
14.10	0.71	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
14.38	0.28	100		100% SHALE	BLUE-GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				NOTE: HARD	
14.43	0.05	100		100% COAL	BLACK, UNWEATHERED.
15.38	0.95	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
16.95	1.57	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
24.55	7.60	100		100% SANDSTONE	SHALY, LAMINAE, BLUE-GREY, UNWEATHERED.
25.16	0.61	100		100% SANDSTONE	GREY, UNWEATHERED.
				NOTE: HARD	
25.49	0.33	100		100% SHALE	BLUE, UNWEATHERED.
25.91	0.42	100		100% COAL	SHALY, INTERCALATIONS, BLACK, UNWEATHERED.
26.28	0.37	100		100% SHALE	GREY, UNWEATHERED.
				NOTE: SOFT AND GREASY	
27.04	0.76	100		100% SHALE	BLUE, UNWEATHERED.
28.05	1.01	100		100% SANDSTONE	GREY, UNWEATHERED.
28.36	0.31	100		100% SANDSTONE	GREY, UNWEATHERED.
				NOTE: HARD	
29.38	1.02	100		100% SHALE	BLUE, UNWEATHERED.
29.43	0.05	100		100% COAL	BLACK, UNWEATHERED.
29.45	0.02	100		100% MUDSTONE	GREY, UNWEATHERED.
29.54	0.09	100		100% COAL	MUDSTONE, INTERCALATIONS, BLACK, UNWEATHERED.
				NOTE: CLOD	
31.09	1.55	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
31.98	0.89	100		100% SHALE	DARK GREY, UNWEATHERED.
32.23	0.25	100		100% SHALE	LIGHT GREY, UNWEATHERED.
32.74	0.51	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
42.19	9.45	100		100% SANDSTONE	GREY, UNWEATHERED.
42.24	0.05	100		100% COAL	BLACK, UNWEATHERED.
43.93	1.69	100		100% SANDSTONE	GREY, UNWEATHERED.
				NOTE: FIRM	
43.98	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED.
				NOTE: HARD	
44.41	0.43	100		100% COAL	BLACK, UNWEATHERED.
44.45	0.04	100		100% MUDSTONE	GREY, UNWEATHERED.
44.92	0.47	100		100% COAL	BLACK, UNWEATHERED.
45.39	0.47	100		100% SHALE	DARK GREY, UNWEATHERED.
46.48	1.09	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
46.94	0.46	100		100% SANDSTONE	GREY, UNWEATHERED.
49.00	2.06	100		100% SHALE	BLUE, UNWEATHERED.
					NOTE: FIRM
49.07	0.07	100		100% COAL	BLACK, UNWEATHERED.
49.20	0.13	100		100% SHALE	BROWN, UNWEATHERED.
50.22	1.02	100		100% SHALE	LIGHT GREY, UNWEATHERED.
					NOTE: FIRM
50.28	0.06	100		100% COAL	BLACK, UNWEATHERED.
50.47	0.19	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, INTERCALATIONS, BLACK, UNWEATHERED.
50.91	0.44	100		100% SHALE	BLACK, UNWEATHERED.
51.07	0.16	100		100% SHALE	LIGHT GREY, UNWEATHERED.
51.21	0.14	100		100% SHALE	DARK GREY, UNWEATHERED.
51.52	0.31	100		100% COAL	BLACK, UNWEATHERED.
51.65	0.13	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
					NOTE: INTERPRETATION ONLY. TERMED AS HARD FLOOR IN CORE RECORD

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

LL2

HOLE TYPE	CORE
EASTING	605,600 M AM GRID
NORTHING	5,375,900 M AM GRID
ELEVATION	10.00 M
TOTAL DEPTH DRILLED	93.97 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.37	1.37	100		100% BOULDERS	SOIL, GREY-BROWN, MODERATELY WEATHERED.
10.95	9.58	100		100% SANDSTONE	GREY, UNWEATHERED.
11.25	0.30	100		100% SHALE	GREY, UNWEATHERED.
				NOTE: HARD	
12.29	1.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
12.45	0.16	100		100% SHALE	COALY, STAINING, GREY, UNWEATHERED.
				NOTE: HARD	
15.82	3.37	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
21.82	6.00	100		100% SANDSTONE	CONGLOMERATIC, GREY, UNWEATHERED.
29.69	7.87	100		100% SANDSTONE	GREY, UNWEATHERED, WEAK ROCK.
30.78	1.09	100		100% SHALE	DARK GREY, UNWEATHERED.
30.94	0.16	100		100% COAL	BLACK, UNWEATHERED.
30.98	0.04	100		100% MUDSTONE	GREY, UNWEATHERED.
31.24	0.26	100		100% COAL	BLACK, UNWEATHERED.
31.26	0.02	100		100% MUDSTONE	GREY, UNWEATHERED.
31.30	0.04	100		100% COAL	BLACK, UNWEATHERED.
31.31	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED.
31.41	0.10	100		100% COAL	BLACK, UNWEATHERED.
31.47	0.06	100		100% MUDSTONE	GREY, UNWEATHERED.
31.53	0.06	100		100% COAL	BLACK, UNWEATHERED.
31.56	0.03	100		100% COAL	ARGILLACEOUS, BANDS, BLACK, UNWEATHERED.
31.83	0.27	100		100% COAL	BLACK, UNWEATHERED.
				NOTE: WITH A FEW THIN BANDS	
31.86	0.03	100		100% MUDSTONE	WHITE, UNWEATHERED.
31.92	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
32.16	0.24	100		100% COAL	BLACK, UNWEATHERED.
				NOTE: WITH THIN BANDS	
32.59	0.43	100		100% COAL	BLACK, UNWEATHERED.
32.61	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED.
32.63	0.02	100		100% COAL	BLACK, UNWEATHERED.
32.66	0.03	100		100% MUDSTONE	GREY, UNWEATHERED.
32.68	0.02	100		100% COAL	BLACK, UNWEATHERED.
33.50	0.82	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: INTERPRETATION OF THE TERM, FLOOR (?)
34.39	0.89	100		100% SHALE	GREY, UNWEATHERED.
					NOTE: FIRM
34.44	0.05	100		100% COAL	BLACK, UNWEATHERED.
35.55	1.11	100		100% SHALE	SILICEOUS, BROWN, UNWEATHERED.
36.82	1.27	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
					NOTE: FIRM
37.27	0.45	100		100% SHALE	SILICEOUS, COALY, GREY, UNWEATHERED.
37.30	0.03	100		100% COAL	BLACK, UNWEATHERED.
38.42	1.12	100		100% SHALE	LIGHT GREY, UNWEATHERED.
					NOTE: FIRM
38.72	0.30	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: HARD
40.00	1.28	100		50% SHALE 50% SHALE	INTERCALATIONS, DARK GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED.
41.35	1.35	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
47.45	6.10	100		100% SHALE	SANDSTONE, BANDS, BLUE-GREY, UNWEATHERED.
49.34	1.89	100		100% SANDSTONE	GREY, UNWEATHERED.
49.56	0.22	100		100% SHALE	BLUE, UNWEATHERED.
50.01	0.45	100		100% SHALE	SILICEOUS, DARK GREY, UNWEATHERED.
50.11	0.10	100		100% COAL	BLACK, UNWEATHERED.
50.85	0.74	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
51.16	0.31	100		100% SHALE	BLACK, UNWEATHERED, WITH PLANT REMAINS.
51.51	0.35	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
52.43	0.92	100		100% SHALE	BLACK, UNWEATHERED.
53.17	0.74	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: FIRM
53.20	0.03	100		100% COAL	BLACK, UNWEATHERED.
53.25	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED.
53.29	0.04	100		100% COAL	BLACK, UNWEATHERED.
54.97	1.68	100		100% SHALE	COALY, BANDS, BLACK, UNWEATHERED.
55.37	0.40	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
55.98	0.61	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: VERY FIRM
63.27	7.29	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: CLEAN
64.62	1.35	100		100% SANDSTONE	CARBONACEOUS, WHITE, UNWEATHERED.
					NOTE: HARD
67.21	2.59	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: VERY HARD
67.67	0.46	100		100% SANDSTONE	COALY, BANDS, DARK GREY, UNWEATHERED.
					NOTE: HARD
68.25	0.58	100		100% PEBBLE CONGLOMERATE	COALY, SHALY, DARK GREY, UNWEATHERED.
68.61	0.36	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
69.47	0.86	100		100% SHALE	BLACK, UNWEATHERED.
70.08	0.61	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
70.18	0.10	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
70.21	0.03	100		100% COAL	BLACK, UNWEATHERED.
70.55	0.34	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
71.46	0.91	100		100% COAL	BLACK, UNWEATHERED.
71.47	0.01	100		100% CLAYSTONE	GREY, UNWEATHERED.
71.69	0.22	100		100% COAL	BLACK, UNWEATHERED.
71.70	0.01	100		100% MUDSTONE	DARK GREY, UNWEATHERED.
					NOTE: SOFT AND GREASY
71.81	0.11	100		100% COAL	BLACK, UNWEATHERED.
72.07	0.26	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: VERY FIRM
72.38	0.31	100		100% SHALE	DARK GREY, UNWEATHERED.
73.18	0.80	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
73.79	0.61	100		100% SANDSTONE	COALY, STAINING, LIGHT GREY, UNWEATHERED.
74.78	0.99	100		100% SHALE	BLUE, UNWEATHERED.
77.24	2.46	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
77.85	0.61	100		100% SHALE	DARK GREY, UNWEATHERED.
77.86	0.01	100		100% COAL	BLACK, UNWEATHERED.
78.07	0.21	100		100% SHALE	BLACK, UNWEATHERED.
78.45	0.38	100		100% COAL	BANDS, BLACK, UNWEATHERED.
78.91	0.46	100		100% SHALE	BLACK, UNWEATHERED.
79.67	0.76	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
79.92	0.25	100		100% SHALE	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.23	0.31	100		100% SANDSTONE	GREY, UNWEATHERED.
81.93	1.70	100		100% SANDSTONE	GREY, UNWEATHERED.
82.46	0.53	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
82.72	0.26	100		100% SHALE	DARK GREY, UNWEATHERED.
82.99	0.27	100		100% SEAT EARTH	GREY, UNWEATHERED.
83.71	0.72	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
83.76	0.05	100		100% COAL	BLACK, UNWEATHERED.
84.62	0.86	100		100% SANDSTONE	GREY, UNWEATHERED.
84.67	0.05	100		100% COAL	BLACK, UNWEATHERED.
84.87	0.20	100		100% SANDSTONE	GREY, UNWEATHERED.
86.55	1.68	100		100% SHALE NOTE: FIRM	SILICEOUS, BLUE, UNWEATHERED.
86.86	0.31	100		100% SHALE	DARK GREY, UNWEATHERED.
87.11	0.25	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
87.59	0.48	100		100% SHALE	DARK GREY, UNWEATHERED.
87.69	0.10	100		100% SANDSTONE,COARSE GRAINED NOTE: HARD	GREY, UNWEATHERED.
88.40	0.71	100		100% SHALE	BLUE, UNWEATHERED.
88.77	0.37	100		100% SHALE	DARK GREY, UNWEATHERED.
89.18	0.41	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
90.06	0.83	100		100% SHALE NOTE: VERY HARD	LIGHT GREY, UNWEATHERED.
93.97	3.91	100		100% SHALE	MUDSTONE, PEBBLY, GREY, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

LL3

HOLE TYPE	CORE
EASTING	604,900 M AM GRID
NORTHING	5,377,000 M AM GRID
ELEVATION	38.00 M
TOTAL DEPTH DRILLED	75.33 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
0.46	0.46	100		100% SOIL NOTE: AND LOAM	GREY-BROWN, WEATHERED TO SOIL.
3.66	3.20	100		100% CLAY	LIGHT GREY, WEATHERED TO SOIL.
3.96	0.30	100		100% SANDSTONE	GREY, COMPLETELY WEATHERED.
20.19	16.23	100		100% SANDSTONE	GREY.
			BASE OF WEATHERING		
21.41	1.22	100		100% SHALE	BLUE, UNWEATHERED.
21.87	0.46	100		100% SANDSTONE	GREY, UNWEATHERED.
22.81	0.94	100		100% SHALE	DARK GREY, UNWEATHERED.
24.13	1.32	100		50% SHALE 50% SHALE	INTERCALATIONS, DARK GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED.
24.14	0.01	100		100% COAL	BLACK, UNWEATHERED.
24.20	0.06	100		100% MUDSTONE	GREY, UNWEATHERED.
24.34	0.14	100		100% COAL	BLACK, UNWEATHERED.
24.42	0.08	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
24.52	0.10	100		100% COAL	BLACK, UNWEATHERED.
24.53	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED.
24.64	0.11	100		100% COAL	BLACK, UNWEATHERED.
24.80	0.16	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
24.93	0.13	100		100% COAL	BLACK, UNWEATHERED.
24.96	0.03	100		100% CLAYSTONE	WHITE, UNWEATHERED.
24.97	0.01	100		100% COAL	BLACK, UNWEATHERED.
24.98	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED.
25.01	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
25.04	0.03	100		100% COAL	BLACK, UNWEATHERED.
25.16	0.12	100		100% MUDSTONE	DARK GREY, UNWEATHERED.
25.19	0.03	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
25.20	0.01	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
25.71	0.51	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
25.77	0.06	100		100% MUDSTONE	GREY, UNWEATHERED.
25.79	0.02	100		100% COAL	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
25.80	0.01	100		100% MUDSTONE	GREY, UNWEATHERED.
26.00	0.20	100		100% SEAT EARTH	GREY-BROWN, UNWEATHERED.
26.87	0.87	100		100% SEAT EARTH	SILICEOUS, GREY, UNWEATHERED.
27.27	0.40	100		100% SEAT EARTH	GREY, UNWEATHERED.
27.32	0.05	100		100% COAL	BLACK, UNWEATHERED
28.70	1.38	100		100% SEAT EARTH	GREY, UNWEATHERED.
30.02	1.32	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
30.12	0.10	100		100% SHALE	SILICEOUS, DARK GREY, UNWEATHERED.
32.18	2.06	100		100% SHALE	BLUE, UNWEATHERED.
32.73	0.55	100		100% SHALE	DARK GREY, UNWEATHERED.
33.98	1.25	100		100% SANDSTONE	STAINING, DARK GREY, UNWEATHERED.
36.47	2.49	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
40.54	4.07	100		100% SANDSTONE	SHALY, LAMINAE, GREY, UNWEATHERED.
41.43	0.89	100		100% SHALE	GREY-BROWN, UNWEATHERED.
41.66	0.23	100		100% SANDSTONE	COALY, BANDS, LIGHT GREY, UNWEATHERED.
43.29	1.63	100		100% SHALE	BLUE, UNWEATHERED.
43.62	0.33	100		100% SHALE	BLACK, UNWEATHERED.
					NOTE: HARD
45.02	1.40	100		100% SANDSTONE	STAINING, DARK GREY, UNWEATHERED.
45.95	0.93	100		100% SHALE	BLUE, UNWEATHERED.
46.89	0.94	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: HARD AND BRITTLE
47.33	0.44	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
48.37	1.04	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
					NOTE: CLEAN
51.62	3.25	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
					NOTE: CLEAN AND FIRM
56.00	4.38	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: FIRM
57.32	1.32	100		100% SHALE	DARK GREY, UNWEATHERED.
57.64	0.32	100		100% SANDSTONE	GREY, UNWEATHERED.
57.69	0.05	100		100% COAL	BLACK, UNWEATHERED.
57.91	0.22	100		100% SHALE	DARK GREY, UNWEATHERED.
57.92	0.01	100		100% COAL	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
58.07	0.15	100		100% SHALE	BLUE, UNWEATHERED.
58.22	0.15	100		100% SANDSTONE	GREY, UNWEATHERED.
58.55	0.33	100		100% SHALE	GREY, UNWEATHERED.
59.01	0.46	100		100% SANDSTONE	GREY, UNWEATHERED.
59.26	0.25	100		100% SHALE	GREY, UNWEATHERED.
59.43	0.17	100		100% COAL	BLACK, UNWEATHERED.
59.86	0.43	100		100% SANDSTONE	GREY, UNWEATHERED.
60.13	0.27	100		100% SHALE	DARK GREY, UNWEATHERED.
60.31	0.18	100		100% SHALE	VARIAGATED COLOUR, UNWEATHERED.
60.33	0.02	100		100% COAL	BLACK, UNWEATHERED.
60.36	0.03	100		100% MUDSTONE	GREY, UNWEATHERED.
60.41	0.05	100		100% COAL	SHALY, BANDS, BLACK, UNWEATHERED.
60.48	0.07	100		100% SHALE	DARK GREY, UNWEATHERED.
61.26	0.78	100		100% COAL	BLACK, UNWEATHERED.
61.33	0.07	100		100% MUDSTONE	GREY, UNWEATHERED.
61.40	0.07	100		100% SHALE	CARBONACEOUS, DARK GREY, UNWEATHERED.
61.49	0.09	100		100% COAL	BLACK, UNWEATHERED.
62.76	1.27	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: MOTTLED
63.82	1.06	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
					NOTE: VERY HARD
64.71	0.89	100		100% SHALE	BLUE-GREY, UNWEATHERED.
					NOTE: VERY FIRM
64.89	0.18	100		100% SHALE	WHITE, UNWEATHERED.
					NOTE: VERY HARD
65.17	0.28	100		100% COAL	BLACK, UNWEATHERED.
					NOTE: POOR QUALITY
65.42	0.25	100		100% SHALE	BLACK, UNWEATHERED.
					NOTE: VERY HARD
65.78	0.36	100		100% SHALE	LIGHT GREY, UNWEATHERED.
65.92	0.14	100		100% COAL	BLACK, UNWEATHERED.
66.33	0.41	100		100% SHALE	GREY, UNWEATHERED.
66.35	0.02	100		100% COAL	BLACK, UNWEATHERED.
66.45	0.10	100		100% SHALE	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: VERY HARD
66.48	0.03	100		100% COAL	BLACK, UNWEATHERED.
67.70	1.22	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
68.89	1.19	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: FIRM
69.07	0.18	100		100% SHALE	GREY, UNWEATHERED.
69.30	0.23	100		100% SHALE	COALY, BLACK, UNWEATHERED.
70.30	1.00	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
70.45	0.15	100		100% SHALE	COALY, BLACK, UNWEATHERED.
70.86	0.41	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
71.01	0.15	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: MOTTLED
71.06	0.05	100		100% SHALE	DARK GREY, UNWEATHERED.
73.60	2.54	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: HARD
75.33	1.73	100		100% DOLERITE	GREY-GREEN, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S1

HOLE TYPE	CORE
EASTING	606,700 M AM GRID
NORTHING	5,376,700 M AM GRID
ELEVATION	4.00 M
TOTAL DEPTH DRILLED	271.96 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
1.52	1.52	100		100% CLAY	SOIL, GREY-BROWN, MODERATELY WEATHERED.
					NOTE: SURFACE CLAY AND DRIFT
2.54	1.02	100		100% SANDSTONE	YELLOW-GREY, UNWEATHERED.
2.64	0.10	100		100% SHALE	BLACK, UNWEATHERED.
					NOTE: HARD
12.73	10.09	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
13.11	0.38	100		100% SHALE	DARK GREY, UNWEATHERED.
					NOTE: HARD AND CURLY
14.22	1.11	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
15.44	1.22	100		100% PEBBLE CONGLOMERATE	DARK GREY, UNWEATHERED.
					NOTE: HARD AND BRITTLE
15.65	0.21	100		100% SHALE	GREY, UNWEATHERED.
					NOTE: HARD AND CURLY
16.51	0.86	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
16.99	0.48	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
29.41	12.42	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
					NOTE: CLEAN
30.10	0.69	100		100% PEBBLE CONGLOMERATE	SHALY, SILICEOUS, GREY, UNWEATHERED.
33.53	3.43	100		100% SANDSTONE	GREY, UNWEATHERED.
35.14	1.61	100		100% SHALE	BLUE, UNWEATHERED.
35.93	0.79	100		100% SHALE	BLACK, UNWEATHERED.
36.33	0.40	100		100% SHALE	BLUE, UNWEATHERED.
					NOTE: GREASY
40.79	4.46	100		50% SHALE 50% SEAT EARTH	SILICEOUS, GREY. GREY. UNWEATHERED.
41.10	0.31	100		100% SANDSTONE	GREY, UNWEATHERED.
41.54	0.44	100		100% SHALE	COALY, BLACK, UNWEATHERED.
41.78	0.24	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
42.14	0.36	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
43.56	1.42	100		50% SHALE 50% SEAT EARTH	GREY. GREY. UNWEATHERED.
43.61	0.05	100		100% COAL	BLACK, UNWEATHERED.
44.04	0.43	100		100% SHALE	SILICEOUS, BROWN, UNWEATHERED.
46.32	2.28	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
46.39	0.07	100		100% SHALE	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.42	0.03	100		100% COAL	BLACK, UNWEATHERED.
48.02	1.60	100		100% SHALE	BLUE, UNWEATHERED.
48.35	0.33	100		100% SHALE	DARK GREY, UNWEATHERED.
50.69	2.34	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
52.74	2.05	100		100% SANDSTONE	SHALY, LAMINAE, GREY, UNWEATHERED.
53.38	0.64	100		100% SANDSTONE	GREY, UNWEATHERED.
57.24	3.86	100		100% SHALE	GREY, UNWEATHERED.
59.11	1.87	100		100% SHALE	BLUE, UNWEATHERED.
59.13	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
59.28	0.15	100		100% COAL	BLACK, UNWEATHERED.
60.40	1.12	100		100% SHALE	BLACK, UNWEATHERED.
60.68	0.28	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
60.91	0.23	100		100% SHALE	BLUE, UNWEATHERED.
61.19	0.28	100		100% SANDSTONE	GREY, UNWEATHERED.
61.98	0.79	100		100% SHALE	BLUE, UNWEATHERED.
63.27	1.29	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
63.98	0.71	100		100% SHALE	BLACK, UNWEATHERED.
66.73	2.75	100		100% SANDSTONE	DARK GREY, UNWEATHERED.
72.36	5.63	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
				NOTE: CLEAN	
72.82	0.46	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
				NOTE: FIRM	
73.28	0.46	100		100% SHALE	BLUE, UNWEATHERED.
76.17	2.89	100		100% SHALE	COALY, BANDS, DARK GREY, UNWEATHERED.
76.53	0.36	100		100% SHALE	COALY, BANDS, VARIAGATED COLOUR, UNWEATHERED.
77.22	0.69	100		100% SHALE	BROWN, UNWEATHERED.
77.67	0.45	100		100% SHALE	BLUE, UNWEATHERED.
				NOTE: HARD	
79.31	1.64	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
79.44	0.13	100		100% SHALE	DARK GREY, UNWEATHERED.
79.49	0.05	100		100% COAL	BLACK, UNWEATHERED.
80.25	0.76	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
80.68	0.43	100		100% COAL	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
81.19	0.51	100		100% SHALE	BROWN, UNWEATHERED.
82.23	1.04	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
82.32	0.09	100		100% SHALE	COALY, BLACK, UNWEATHERED.
82.85	0.53	100		100% SHALE	SILICEOUS, BLUE, UNWEATHERED.
83.95	1.10	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
84.35	0.40	100		100% SHALE	BLUE, UNWEATHERED.
84.37	0.02	100		100% COAL	BLACK, UNWEATHERED.
85.18	0.81	100		100% SHALE	BLUE, UNWEATHERED.
85.69	0.51	100		100% COAL	BLACK, UNWEATHERED.
85.73	0.04	100		100% COAL	MUDSTONE, STREAKS, BLACK, UNWEATHERED.
85.93	0.20	100		100% COAL	BLACK, UNWEATHERED.
85.97	0.04	100		100% MUDSTONE	BLACK, UNWEATHERED.
				NOTE: SOFT	
85.98	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED.
86.03	0.05	100		100% COAL, BRIGHT	BLACK, UNWEATHERED.
86.06	0.03	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
88.49	2.43	100		50% SHALE 50% SHALE	DARK GREY. BLUE. UNWEATHERED.
89.10	0.61	100		100% SEAT EARTH	GREY, UNWEATHERED.
89.12	0.02	100		100% COAL	BLACK, UNWEATHERED.
92.32	3.20	100		50% SHALE 50% SHALE	DARK GREY. BLUE. UNWEATHERED.
93.84	1.52	100		100% SANDSTONE	GREY, UNWEATHERED.
				NOTE: VERY JOINTY	
94.75	0.91	100		100% SANDSTONE	WHITE, UNWEATHERED.
95.82	1.07	100		100% PEBBLE CONGLOMERATE	PYRITIC, GREY, WITH CRYSTALLINE PYRITE, UNWEATHERED.
98.56	2.74	100		100% SANDSTONE	GREEN, UNWEATHERED.
99.26	0.70	100		100% PEBBLE CONGLOMERATE	CALCITIC, LIGHT GREY, UNWEATHERED.
100.84	1.58	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
102.44	1.60	100		100% SANDSTONE	GREY, UNWEATHERED.
102.69	0.25	100		100% SHALE	COALY, STAINING, GREY, UNWEATHERED.
103.91	1.22	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
104.22	0.31	100		100% PEBBLE CONGLOMERATE	GREY, UNWEATHERED.
107.99	3.77	100		100% SHALE	MUDSTONE, PEBBLY, GREY, WITH QUARTZ, UNWEATHERED.
				NOTE: FIRM	
108.12	0.13	100		100% SEAT EARTH	GREY, UNWEATHERED.
111.28	3.16	100		100% SHALE	COALY, TRACES, GREY, UNWEATHERED.
				NOTE: MUDDY	
117.41	6.13	100		100% SHALE	MUDSTONE, GREY, UNWEATHERED.
141.10	23.69	100		100% SHALE	MUDSTONE, GREY, UNWEATHERED, WITH TRACE FOSSILS.
148.01	6.91	100		100% SANDSTONE	PEBBLY, GREEN, UNWEATHERED.
150.98	2.97	100		100% LIMESTONE	FOSSILIFERROUS, WHITE, UNWEATHERED.
151.23	0.25	100		100% GRANITE	VARIAGATED COLOUR, UNWEATHERED.
				NOTE: ROCK, LIKE GRANITE	
188.80	37.57	100		100% LIMESTONE	FOSSILIFERROUS, WHITE, UNWEATHERED.
				NOTE: HARD	
227.15	38.35	100		100% LIMESTONE	BLUE, UNWEATHERED.
240.17	13.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
245.26	5.09	100		100% SANDSTONE	SHALY, CONGLOMERATIC, GREY, UNWEATHERED.
245.95	0.69	100		100% SHALE	CONGLOMERATIC, GREY, UNWEATHERED.
248.84	2.89	100		100% SANDSTONE,COARSE GRAINED	COALY, TRACES, GREY, UNWEATHERED.
255.21	6.37	100		100% SANDSTONE	VERY COARSE GRAINED, CONGLOMERATIC, GREY, UNWEATHERED.
271.96	16.75	100		100% BOULDER CONGLOMERATE	VARIAGATED COLOUR, MODERATELY WEATHERED.
				NOTE: ROTTEN GRANITE BOULDERS	

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S2

HOLE TYPE	CORE
EASTING	601,400 M AM GRID
NORTHING	5,374,600 M AM GRID
ELEVATION	110.00 M
TOTAL DEPTH DRILLED	196.63 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
13.41	13.41	100		100% GRAVEL	SOIL, GREY, MODERATELY WEATHERED.
					NOTE: SURFACE SHAFT
16.92	3.51	100		100% SANDSTONE	ARGILLACEOUS, GREY, UNWEATHERED.
19.20	2.28	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, INTERCALATIONS, GREY, UNWEATHERED.
22.86	3.66	100		100% CARBONACEOUS MUDSTONE	SHALY, BLACK, UNWEATHERED.
					NOTE: SHALE IS HARD AND BRITTLE
28.04	5.18	100		100% SHALE	SILICEOUS, LIGHT GREY, UNWEATHERED.
29.26	1.22	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
29.62	0.36	00		100% COAL	BLACK, UNWEATHERED.
					NOTE: INFERIOR QUALITY
35.89	6.27	100		100% SHALE	LIGHT GREY, UNWEATHERED.
40.23	4.34	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
42.24	2.01	100		100% SHALE	GREY, UNWEATHERED.
52.32	10.08	100		100% SANDSTONE	COALY, BANDS, GREY, UNWEATHERED, WEAK ROCK.
					NOTE: THIN COAL PIPES
53.54	1.22	100		100% CARBONACEOUS MUDSTONE	SHALY, BLACK, UNWEATHERED.
					NOTE: COAL VEINS
54.61	1.07	100		100% SEAT EARTH	BLACK, UNWEATHERED.
56.57	1.96	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
56.87	0.30	100		100% SANDSTONE	GREY, UNWEATHERED.
57.56	0.69	100		100% SHALE	GREY, UNWEATHERED.
72.64	15.08	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
72.68	0.04	100		100% COAL	BLACK, UNWEATHERED.
141.36	68.68	100		100% SANDSTONE	COALY, STAINING, GREY, UNWEATHERED.
					NOTE: ALSO WITH COAL PIPES
169.00	27.64	100		100% SANDSTONE	GREY, UNWEATHERED.
169.46	0.46	100		100% COAL	BLACK, UNWEATHERED.
					NOTE: ONLY 8 INCHES (203.2MM) OF CLEAN COAL
186.88	17.42	100		100% SANDSTONE,FINE GRAINED	SHALY, GREY, UNWEATHERED.
				TOP OF DALMAYNE D LOWER : -76.88 M R.L.	
186.98	0.10	100		100% COAL	BLACK, UNWEATHERED.
187.03	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED.
187.36	0.33	100		100% COAL	BLACK, UNWEATHERED.
187.41	0.05	100		100% MUDSTONE	GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
187.44	0.03	100		100% COAL	BLACK, UNWEATHERED.
187.45	0.01	100		100% CLAYSTONE	WHITE, UNWEATHERED.
187.51	0.06	100		100% COAL	BLACK, UNWEATHERED.
187.55	0.04	100		100% CLAYSTONE	WHITE, UNWEATHERED.
187.79	0.24	100		100% COAL	BLACK, UNWEATHERED.
187.86	0.07	100		100% CLAYSTONE	WHITE, UNWEATHERED.
188.17	0.31	100		100% COAL	BLACK, UNWEATHERED.
			BASE OF DALMAYNE D LOWER : THICKNESS= 1.29 M; SAMPLED THICKNESS= 0.00 M		
196.63	8.46	100		100% SHALE NOTE: HARD	SILICEOUS, GREY, UNWEATHERED, WITH PLANT REMAINS.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DDL	0.00 M	186.88 - 188.17 M	1.29 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S3

HOLE TYPE	CORE
EASTING	601,300 M AM GRID
NORTHING	5,358,400 M AM GRID
ELEVATION	58.00 M
TOTAL DEPTH DRILLED	144.78 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
2.13	2.13	100		100% CLAY	SANDSTONE, GREY, HIGHLY WEATHERED. NOTE: STIFF CLAY AND HARD, BROKEN SANDSTONE
3.05	0.92	100		100% SANDSTONE	GREY, SLIGHTLY WEATHERED. NOTE: SOFT
4.88	1.83	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: BROKEN
7.62	2.74	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: SOLID
16.76	9.14	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: BROKEN
24.99	8.23	100		100% SANDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WITH PLANT REMAINS.
34.14	9.15	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: SOLID
37.19	3.05	100		100% SANDSTONE	GREY, UNWEATHERED.
37.59	0.40	100		100% SHALE	BLUE, UNWEATHERED.
38.25	0.66	100		100% SANDSTONE	GREY, UNWEATHERED.
54.86	16.61	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
63.40	8.54	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: SOLID
67.06	3.66	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
71.02	3.96	100		100% SANDSTONE	GREY, UNWEATHERED. NOTE: BROKEN
72.14	1.12	100		100% SANDSTONE	GREY, UNWEATHERED.
72.36	0.22	100		100% COAL	BLACK, UNWEATHERED.
73.46	1.10	100		100% SHALE	BLUE, UNWEATHERED.
76.56	3.10	100		100% SHALE	BLUE, UNWEATHERED, WITH PLANT REMAINS.
77.72	1.16	100		100% COAL	FRIABLE, BLACK, UNWEATHERED.
79.25	1.53	100		100% SHALE	SANDSTONE, BANDS, GREY, UNWEATHERED.
81.84	2.59	100		100% SHALE	SANDSTONE, BANDS, BLUE, UNWEATHERED.
83.74	1.90	100		100% SHALE	SANDSTONE, BANDS, GREY, UNWEATHERED. NOTE: BROKEN SHALE
87.48	3.74	100		100% SHALE	ARGILLACEOUS, BLUE, UNWEATHERED.
89.61	2.13	100		100% SHALE	ARGILLACEOUS, SANDSTONE, GREY, UNWEATHERED.
91.14	1.53	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
91.59	0.45	100		100% LIMESTONE	WHITE, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
93.57	1.98	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
94.79	1.22	100		100% CLAY	SANDSTONE, BANDS, GREY, UNWEATHERED.
97.08	2.29	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
97.23	0.15	100		100% COAL	BLACK, UNWEATHERED.
98.76	1.53	100		100% SHALE	SANDSTONE, BANDS, GREY, UNWEATHERED.
102.11	3.35	100		100% SHALE	ARGILLACEOUS, DARK GREY, UNWEATHERED.
102.41	0.30	100		100% COAL	BLACK, UNWEATHERED.
103.94	1.53	100		100% SHALE	ARGILLACEOUS, BLUE, UNWEATHERED.
111.81	7.87	100		100% SANDSTONE	GREY, UNWEATHERED.
111.94	0.13	100		100% COAL	BLACK, UNWEATHERED.
113.54	1.60	100		100% SHALE	ARGILLACEOUS, DARK GREY, UNWEATHERED.
113.77	0.23	100		100% COAL	BLACK, UNWEATHERED.
115.98	2.21	100		100% SHALE	ARGILLACEOUS, DARK GREY, UNWEATHERED.
117.61	1.63	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
119.79	2.18	100		100% SANDSTONE	GREY, UNWEATHERED.
123.44	3.65	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
123.67	0.23	100		100% SANDSTONE	GREY, UNWEATHERED.
128.32	4.65	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
129.54	1.22	100		50% SHALE 50% LIMESTONE	ARGILLACEOUS, GREY. WHITE. UNWEATHERED.
130.33	0.79	100		100% SANDSTONE	GREY, UNWEATHERED.
130.76	0.43	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
132.74	1.98	100		100% SHALE	ARGILLACEOUS, DARK GREY, UNWEATHERED.
135.94	3.20	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
136.09	0.15	100		100% SANDSTONE	WHITE, UNWEATHERED. NOTE: HARD CEMENTED
138.84	2.75	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED. NOTE: BROKEN SANDSTONE
141.35	2.51	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED. NOTE: BROKEN SANDSTONE GIVING PLACE TO GRANITE
141.73	0.38	100		100% GRANITE	SHALY, FRAGMENTS, VARIAGATED COLOUR, UNWEATHERED.
143.56	1.83	100		100% GRANITE	VARIAGATED COLOUR, UNWEATHERED.
144.78	1.22	100		100% GRANITE	VARIAGATED COLOUR, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S4

HOLE TYPE	CORE
EASTING	600,800 M AM GRID
NORTHING	5,356,500 M AM GRID
ELEVATION	22.00 M
TOTAL DEPTH DRILLED	218.85 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	

INFORMATION AVAILABLE : LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : S4

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
0.76	0.76	100		100% CLAY	SOIL, GREY-BROWN, MODERATELY WEATHERED. NOTE: SURFACE CLAY
4.88	4.12	100		100% SANDSTONE	GREY, UNWEATHERED.
5.49	0.61	100		100% SHALE	BLUE, UNWEATHERED.
6.55	1.06	100		100% SANDSTONE	GREY, UNWEATHERED.
6.93	0.38	100		100% SHALE	COALY, DARK GREY, UNWEATHERED.
7.24	0.31	100		100% SHALE	BLUE, UNWEATHERED.
7.32	0.08	100		100% COAL	BLACK, UNWEATHERED.
8.53	1.21	100		100% SHALE	BLUE-GREY, UNWEATHERED.
10.06	1.53	100		100% SHALE	BLUE, UNWEATHERED.
10.36	0.30	100		100% SHALE	DARK GREY, UNWEATHERED.
10.41	0.05	100		100% COAL	BLACK, UNWEATHERED.
10.67	0.26	100		100% SHALE	DARK GREY, UNWEATHERED.
10.77	0.10	100		100% COAL	BLACK, UNWEATHERED.
10.97	0.20	100		100% SHALE	DARK GREY, UNWEATHERED.
11.13	0.16	100		100% COAL	BLACK, UNWEATHERED.
11.89	0.76	100		100% SHALE	BLUE, UNWEATHERED.
12.80	0.91	100		100% SHALE	COALY, BANDS, DARK GREY, UNWEATHERED.
17.07	4.27	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED.
27.13	10.06	100		100% SANDSTONE	COALY, LAMINAE, GREY, UNWEATHERED.
32.92	5.79	100		100% SANDSTONE	GREY, UNWEATHERED.
36.88	3.96	100		100% SANDSTONE	BADLY BROKEN, GREY, UNWEATHERED.
39.93	3.05	100		100% SANDSTONE	GREY, UNWEATHERED.
40.23	0.30	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED.
45.72	5.49	100		100% SANDSTONE	GREY, UNWEATHERED.
50.44	4.72	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
64.62	14.18	100		100% SANDSTONE	GREY, UNWEATHERED.
77.42	12.80	100		100% SANDSTONE	COALY, LAMINAE, GREY, UNWEATHERED.
83.82	6.40	100		100% SANDSTONE	GREY, UNWEATHERED.
86.77	2.95	100		100% SANDSTONE	GREY, UNWEATHERED.
88.47	1.70	100		100% SHALE	COALY, BLUE, UNWEATHERED.
88.85	0.38	100		100% SANDSTONE	GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
89.20	0.35	100		100% SHALE	COALY, LAMINAE, BLACK, UNWEATHERED.
89.26	0.06	100		100% SANDSTONE	GREY, UNWEATHERED.
89.56	0.30	100		100% SHALE	BLACK, UNWEATHERED.
93.42	3.86	100		100% SANDSTONE	GREY, UNWEATHERED.
103.94	10.52	100		100% SANDSTONE	GREY, UNWEATHERED.
105.46	1.52	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
105.97	0.51	100		100% COAL	BLACK, UNWEATHERED.
106.02	0.05	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
106.20	0.18	100		100% COAL	BLACK, UNWEATHERED.
107.29	1.09	100		100% SHALE	BLUE-GREY, UNWEATHERED.
107.44	0.15	100		100% COAL	BLACK, UNWEATHERED.
110.49	3.05	100		100% SHALE	ARGILLACEOUS, BLUE-GREY, UNWEATHERED.
113.69	3.20	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
115.67	1.98	100		100% SHALE	ARGILLACEOUS, BLUE-GREY, UNWEATHERED.
118.57	2.90	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED.
118.82	0.25	100		100% SHALE	COALY, BLACK, UNWEATHERED.
119.18	0.36	100		100% SHALE	ARGILLACEOUS, BLUE, UNWEATHERED.
123.14	3.96	100		100% SANDSTONE	SHALY, BANDS, GREY, UNWEATHERED.
127.10	3.96	100		100% SANDSTONE	GREY, UNWEATHERED.
					NOTE: SOLID SANDSTONE
127.36	0.26	100		100% LIMESTONE	WHITE, UNWEATHERED.
127.71	0.35	100		100% SHALE	DARK GREY, UNWEATHERED.
131.29	3.58	100		100% SANDSTONE	GREY, UNWEATHERED.
134.47	3.18	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
135.18	0.71	100		100% SHALE	ARGILLACEOUS, BLACK, UNWEATHERED.
143.56	8.38	100		100% SANDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
145.49	1.93	100		100% SANDSTONE	SHALY, BANDS, GREY, UNWEATHERED.
145.69	0.20	100		100% SHALE	COALY, DARK GREY, UNWEATHERED.
146.91	1.22	100		100% SHALE	SILICEOUS, GREY, UNWEATHERED.
153.31	6.40	100		100% SANDSTONE	SHALY, GREY, UNWEATHERED.
158.50	5.19	100		100% SANDSTONE	GREY, UNWEATHERED.
160.32	1.82	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
160.63	0.31	100		100% SHALE	GREY, UNWEATHERED.
160.88	0.25	100		100% LIMESTONE	WHITE, UNWEATHERED. NOTE: WITH CARBONATE OF IRON
162.76	1.88	100		100% SHALE	BLUE-GREY, UNWEATHERED.
165.35	2.59	100		100% SHALE	DARK GREY, UNWEATHERED.
165.66	0.31	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
167.18	1.52	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED.
170.54	3.36	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
174.04	3.50	100		100% SHALE	ARGILLACEOUS, SILICEOUS, GREY, UNWEATHERED.
175.03	0.99	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
176.61	1.58	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
180.44	3.83	100		100% SANDSTONE	GREY, UNWEATHERED.
182.88	2.44	100		100% SANDSTONE	GREY, UNWEATHERED.
184.40	1.52	100		100% QUARTZITE	WHITE, UNWEATHERED. NOTE: AND CEMENT
185.62	1.22	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
187.15	1.53	100		100% SANDSTONE	GREY, UNWEATHERED.
190.02	2.87	100		100% SANDSTONE	BADLY BROKEN, SHALY, GREY, UNWEATHERED.
192.02	2.00	100		100% SHALE	ARGILLACEOUS, BLUE, UNWEATHERED.
192.56	0.54	100		100% LIMESTONE	SHALY, INTERCALATIONS, LIGHT GREY, UNWEATHERED.
196.06	3.50	100		100% PEBBLE CONGLOMERATE	BADLY BROKEN, GREY, UNWEATHERED.
198.04	1.98	100		100% PEBBLE CONGLOMERATE	SILICEOUS, SHALY, GREY, UNWEATHERED.
199.16	1.12	100		100% GRANITE	CONGLOMERATIC, VARIAGATED COLOUR, UNWEATHERED.
199.72	0.56	100		100% GRANITE	CONGLOMERATIC, FINE GRAINED, VARIAGATED COLOUR, UNWEATHERED.
208.84	9.12	100		100% SANDSTONE,COARSE GRAINED	VARIAGATED COLOUR, UNWEATHERED. NOTE: WITH GRANITIC CEMENT
218.85	10.01	100		100% GRANITE	SANDSTONE, VARIAGATED COLOUR, UNWEATHERED. NOTE: GRANITIC CEMENT

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S5

HOLE TYPE	CORE
EASTING	599,600 M AM GRID
NORTHING	5,357,600 M AM GRID
ELEVATION	160.00 M
TOTAL DEPTH DRILLED	228.90 M
DRILLING STARTED	1/ 1/01
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	

INFORMATION AVAILABLE : LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : S5

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.66	3.66	100		100% SOIL	GREY-BROWN, MODERATELY WEATHERED.
7.62	3.96	100		100% DOLERITE	SCREE, GREY, MODERATELY WEATHERED.
12.34	4.72	100		100% IRONSTONE	DETRITAL, PINK-BROWN, MODERATELY WEATHERED.
17.07	4.73	100		100% SHALE	DETRITAL, PEBBLY, GREY, MODERATELY WEATHERED.
18.90	1.83	100		100% SHALE	COALY, LAMINAE, BLUE-GREY, UNWEATHERED.
20.27	1.37	100		100% SHALE	BADLY BROKEN, BLUE, UNWEATHERED.
21.95	1.68	100		100% SHALE	BLUE-GREY, UNWEATHERED.
24.69	2.74	100		100% SHALE	COALY, LAMINAE, GREY, UNWEATHERED.
24.89	0.20	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
29.92	5.03	100		100% SHALE	BLUE-GREY, UNWEATHERED.
30.68	0.76	100		100% SANDSTONE	GREY, UNWEATHERED.
35.10	4.42	100		50% SHALE 50% SHALE	BLUE. DARK BROWN. UNWEATHERED.
38.71	3.61	100		100% SHALE	ARGILLACEOUS, BLUE, UNWEATHERED.
39.57	0.86	100		100% SANDSTONE	GREY, UNWEATHERED.
45.72	6.15	100		100% SHALE	ARGILLACEOUS, GREY, UNWEATHERED.
46.63	0.91	100		100% SANDSTONE	GREY, UNWEATHERED.
46.74	0.11	100		100% SHALE	DARK GREY, UNWEATHERED.
46.94	0.20	100		100% COAL	BLACK, UNWEATHERED.
49.83	2.89	100		100% SHALE	ARGILLACEOUS, BLUE-GREY, UNWEATHERED.
60.35	10.52	100		100% SHALE	BADLY BROKEN, COALY, BLUE-GREY, UNWEATHERED.
60.96	0.61	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED.
69.19	8.23	100		100% SANDSTONE	COALY, TRACES, LIGHT GREY, UNWEATHERED.
70.41	1.22	100		100% SHALE	COALY, LAMINAE, BLUE-GREY, UNWEATHERED.
71.68	1.27	100		100% SHALE	BLUE-GREY, UNWEATHERED.
72.06	0.38	100		100% COAL	MUDSTONE, BANDS, BLACK, UNWEATHERED.
86.72	14.66	100		100% SANDSTONE	COALY, TRACES, GREY, UNWEATHERED.
87.48	0.76	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
98.04	10.56	100		100% SANDSTONE	COALY, TRACES, GREY, UNWEATHERED.
99.06	1.02	100		100% LIMESTONE	SHALY, INTERCALATIONS, LIGHT GREY, UNWEATHERED.
106.38	7.32	100		100% SANDSTONE	COALY, TRACES, GREY, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
106.60	0.22	100		100% SHALE	COALY, LAMINAE, DARK GREY, UNWEATHERED.
109.12	2.52	100		100% SANDSTONE	GREY, UNWEATHERED.
133.81	24.69	100		100% SANDSTONE	COALY, TRACES, GREY, UNWEATHERED.
137.16	3.35	100		100% SANDSTONE	SHALY, COALY, GREY, UNWEATHERED.
162.31	25.15	100		100% SANDSTONE	COALY, TRACES, GREY, UNWEATHERED.
164.44	2.13	100		100% SHALE	BLUE-GREY, UNWEATHERED.
164.64	0.20	100		100% COAL	BLACK, UNWEATHERED.
165.71	1.07	100		100% SHALE	COALY, BANDS, GREY, UNWEATHERED.
165.86	0.15	100		100% COAL	BLACK, UNWEATHERED.
165.96	0.10	100		100% MUDSTONE	GREY, UNWEATHERED.
166.27	0.31	100		100% COAL	BLACK, UNWEATHERED.
166.42	0.15	100		100% MUDSTONE	GREY, UNWEATHERED.
166.65	0.23	100		100% COAL	BLACK, UNWEATHERED.
167.64	0.99	100		100% SANDSTONE	SHALY, INTERCALATIONS, GREY, UNWEATHERED.
171.60	3.96	100		100% SHALE	BADLY BROKEN, BLUE-GREY, UNWEATHERED.
172.06	0.46	100		100% SHALE	DARK GREY, UNWEATHERED.
174.50	2.44	100		100% SHALE	GREY-BROWN, MODERATELY WEATHERED.
179.53	5.03	100		100% SHALE	SANDSTONE, BADLY BROKEN, GREY, UNWEATHERED.
183.18	3.65	100		100% SHALE	BADLY BROKEN, BLUE-GREY, UNWEATHERED.
186.23	3.05	100		100% SHALE	SANDSTONE, BADLY BROKEN, GREY, UNWEATHERED.
189.59	3.36	100		100% SANDSTONE	BADLY BROKEN, GREY, UNWEATHERED.
198.42	8.83	100		100% SANDSTONE	GREEN, UNWEATHERED.
206.81	8.39	100		50% SANDSTONE 50% SHALE	COALY, TRACES, GREY. COALY, TRACES, GREY. UNWEATHERED.
209.70	2.89	100		50% SANDSTONE 50% SHALE	COALY, BADLY BROKEN, GREY. COALY, BADLY BROKEN, GREY. UNWEATHERED.
217.32	7.62	100		100% SHALE	SANDSTONE, INTERCALATIONS, GREY, UNWEATHERED.
220.68	3.36	100		100% SANDSTONE	WHITE, UNWEATHERED.
221.28	0.60	100		100% SANDSTONE	GREY, UNWEATHERED.
224.64	3.36	100		100% GRANITE	FINE GRAINED, VARIAGATED COLOUR, UNWEATHERED.
228.90	4.26	100		100% GRANITE	VARIAGATED COLOUR, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S 6

HOLE TYPE	CORE
EASTING	606,900 M AM GRID
NORTHING	5,377,400 M AM GRID
ELEVATION	10.00 M
TOTAL DEPTH DRILLED	76.20 M
DRILLING STARTED	16/11/44
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	

PETROPHYSICAL WIRELINE LOGS RUN :

*** FRAME E03***

BOREHOLE : S 6

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.52	1.52	0		CORE LOSS	
2.13	0.61	100		100% CLAY	
3.81	1.68	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
4.88	1.07	100		100% COAL	BLACK.
10.36	5.48	100		100% SANDSTONE	
23.77	13.41	100		100% SANDSTONE	GREY.
25.60	1.83	100		100% SANDSTONE	CARBONACEOUS, DARK BROWN.
25.65	0.05	100		100% COAL	BLACK.
31.09	5.44	100		100% SANDSTONE	CARBONACEOUS, DARK BROWN.
35.05	3.96	100		100% MUDSTONE	
36.88	1.83	100		100% SANDSTONE	GREY.
37.19	0.31	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
42.14	4.95	0		CORE LOSS	NOTE: NO DRILLING RECORDS FROM 37.19M TO 42.14M
42.52	0.38	100		100% COAL	BLACK.
42.60	0.08	100		100% MUDSTONE	
42.90	0.30	100		100% COAL	BLACK.
43.13	0.23	100		100% COAL	BLACK.
43.41	0.28	100		100% COAL	BLACK.
43.58	0.17	100		100% COAL, HEAVY DULL	BLACK. NOTE: COAL WAS ANALYSED BUT NO MOISTURE VALUES GIVEN
56.08	12.50	0		CORE LOSS	NOTE: NO DRILLING RECORDS FROM 43.58M TO 56.08M
76.20	20.12	100		100% MUDSTONE	

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

S 7

HOLE TYPE	CORE
EASTING	606,700 M AM GRID
NORTHING	5,377,500 M AM GRID
ELEVATION	10.00 M
TOTAL DEPTH DRILLED	48.46 M
DRILLING STARTED	27/02/45
DRILLING TIME	
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.61	0.61	100		100% SOIL	
0.91	0.30	100		100% SAND	
3.66	2.75	100		100% CLAY	ARENACEOUS.
6.71	3.05	60		100% CLAY	BROWN-BLACK, SOFT.
17.68	10.97	47		100% MUDSTONE	
21.95	4.27	84		100% SANDSTONE	LIMONITIC, LIGHT GREY.
33.83	11.88	85		100% SANDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY.
35.66	1.83	83		100% SANDSTONE	LIMONITIC, LIGHT GREY.
36.58	0.92	100		100% MUDSTONE	GREY.
38.10	1.52	100		100% SANDSTONE	LIMONITIC, LIGHT GREY.
39.62	1.52	95		100% SHALE	
46.03	6.41	86		100% SANDSTONE	LIMONITIC, LIGHT GREY.
47.40	1.37	44		100% COAL	BLACK.
48.46	1.06	57		100% SANDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DDH1

HOLE TYPE	CORE
EASTING	602,279 M AM GRID
NORTHING	5,385,347 M AM GRID
ELEVATION	416.40 M
TOTAL DEPTH DRILLED	284.00 M
DRILLING STARTED	17/ 6/74
DRILLING TIME	
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.68	11.68	61		100% DOLERITE	SCREE, ARGILLACEOUS, GREY, MODERATELY WEATHERED.
16.15	4.47	93		100% DOLERITE	PEBBLY, ARGILLACEOUS, GREY, MODERATELY WEATHERED, WITH MUD PELLETS.
21.12	4.97	0		CORE LOSS	NOTE: PROBABLY CLAY AND MUDSTONE
22.25	1.13	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, LIGHT GREY. ARGILLACEOUS, BANDS, DARK GREY. WITH CALCITE ON FRACTURES, UNWEATHERED, BEDS DIP 3 DEG.
27.56	5.31	84		100% MUDSTONE	SILICEOUS, ARGILLACEOUS, LIGHT GREY, WITH CALCITE, UNWEATHERED, WITH CARBONACEOUS WISPS.
28.84	1.28	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
41.15	12.31	100		100% SANDSTONE	COALY, LAMINAE, GREY, UNWEATHERED.
41.75	0.60	100		100% CARBONACEOUS MUDSTONE	GRADING TO, COALY, DARK GREY, UNWEATHERED.
41.97	0.22	100		100% MUDSTONE	SILICEOUS, BRIGHT COAL, GREY, UNWEATHERED.
42.65	0.68	100		100% CARBONACEOUS MUDSTONE	SILICEOUS, GREY, UNWEATHERED.
42.91	0.26	100		100% SANDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED.
43.80	0.89	100		100% SANDSTONE	COALY, STREAKS, GREY, UNWEATHERED.
44.66	0.86	100		100% MUDSTONE	SANDSTONE, LAMINAE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
51.75	7.09	100		100% MUDSTONE	SILICEOUS, GREY, UNWEATHERED. NOTE: GRADES TO CARBONACEOUS MUDSTONE OVER LAST 53CM. OCCASIONAL COAL STREAKS FROM 45.10M TO 45.70M. PUGGY ZONE FROM 50.82M TO 51.22M. MUDSTONE LAMINATED IN PART
53.72	1.97	100		100% CARBONACEOUS MUDSTONE	GRADING TO, SILICEOUS, DARK GREY, UNWEATHERED. NOTE: CARBON CONTENT VARIES (SOME MUDSTONE PRESENT)
57.25	3.53	100		100% MUDSTONE	SILICEOUS, LAMINAE, UNWEATHERED, WITH CARBONACEOUS WISPS.
59.00	1.75	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
74.52	15.52	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, GREY, UNWEATHERED. NOTE: MINOR MUDSTONE
74.93	0.41	100	65	100% COAL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, BEDS DIP 4 DEG. NOTE: COAL IS OF POOR QUALITY
75.04	0.11	100		100% COAL	MUDSTONE, STREAKS, BLACK, UNWEATHERED. NOTE: COAL IS OF POOR QUALITY
76.09	1.05	100	66	100% COAL	MUDSTONE, STREAKS, BLACK, UNWEATHERED. NOTE: COAL IS OF POOR QUALITY

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
78.03	1.94	100	66	50% COAL 50% MUDSTONE	INTERCALATIONS, BLACK. INTERCALATIONS, GREY. UNWEATHERED. NOTE: COAL IS OF POOR QUALITY
79.05	1.02	100	67	50% COAL 50% MUDSTONE	INTERCALATIONS, BLACK. INTERCALATIONS, GREY. UNWEATHERED. NOTE: COAL IS OF POOR QUALITY
80.28	1.23	100	68	50% COAL 50% MUDSTONE	INTERCALATIONS, BLACK. INTERCALATIONS, GREY. UNWEATHERED. NOTE: COAL IS OF POOR QUALITY
80.49	0.21	100	69	50% COAL 50% MUDSTONE	INTERCALATIONS, BLACK. INTERCALATIONS, GREY. UNWEATHERED. NOTE: COAL IS OF POOR QUALITY
81.53	1.04	100	69	100% COAL, BRIGHT	ARGILLACEOUS, BLACK, WITH CALCITE, UNWEATHERED. NOTE: THIS SEAM IS PROBABLY THAT MINED AT DALMAYNE COLLIERY
82.55	1.02	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: CARBONACEOUS IN FIRST 10CM
89.67	7.12	100		100% SANDSTONE	COALY, STREAKS, GREY, UNWEATHERED. NOTE: MINOR MUDSTONE. SANDSTONE COARSER FROM 85.12M
89.82	0.15	100		100% COAL, BRIGHT	CALCITIC, BLACK, UNWEATHERED.
90.12	0.30	100		100% MUDSTONE	SILICEOUS, DARK GREY, UNWEATHERED. NOTE: GRADES TO SOFT AND CRUMBLY LIGHT GREEN-GREY MUDSTONE
90.52	0.40	100		100% MUDSTONE	SILICEOUS, CARBONACEOUS, GREY, UNWEATHERED.
94.49	3.97	100		100% SANDSTONE	MUDSTONE, INTERCALATIONS, GREY, UNWEATHERED. NOTE: SANDSTONE CONTENT INCREASES WITH DEPTH
95.42	0.93	100	70	100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDED COAL SEAM (PREDOMINANTLY POOR QUALITY COAL)
95.73	0.31	100		100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDED COAL SEAM (PREDOMINANTLY POOR QUALITY COAL)
97.15	1.42	100	71	100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDED COAL SEAM (PREDOMINANTLY POOR QUALITY COAL)
98.96	1.81	100	72	100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDED COAL SEAM (PREDOMINANTLY POOR QUALITY COAL)
99.18	0.22	100	73	100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDED COAL SEAM (PREDOMINANTLY POOR QUALITY COAL)
99.25	0.07	100		100% CARBONACEOUS MUDSTONE	SILICEOUS, DARK GREY, UNWEATHERED.
100.35	1.10	100		100% MUDSTONE	GRADING TO, SANDSTONE, UNWEATHERED. NOTE: TRANSITION ZONE
134.18	33.83	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, GREY, UNWEATHERED. NOTE: MINOR FINE BANDS AND STREAKS OF COAL AND FRAGMENTS OF

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
					MUDSTONE (SOME WITH CARBONACEOUS MATERIAL)
134.43	0.25	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED. NOTE: MUDDY COAL FOR THE LAST 8CM
159.59	25.16	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, GREY, UNWEATHERED. NOTE: MINOR FINE BANDS AND STREAKS OF COAL AND FRAGMENTS OF MUDSTONE
				TOP OF DALMAYNE D : 256.81 M R.L.	
161.14	1.55	84	74	100% COAL, BRIGHT	BLACK, WITH CALCITE, UNWEATHERED. NOTE: SOME FINE POWDERY COAL WASHED AWAY. OCCASIONAL STONE BANDS
				BASE OF DALMAYNE D : THICKNESS= 1.55 M; SAMPLED THICKNESS= 1.55 M	
162.53	1.39	84	75	100% COAL, BRIGHT	BLACK, WITH CALCITE, UNWEATHERED. NOTE: SOME FINE POWDERY COAL WASHED AWAY. OCCASIONAL STONE BANDS
				TOP OF DALMAYNE D : 253.87 M R.L.	
162.59	0.06	84		100% MUDSTONE	SILICEOUS, ARGILLACEOUS, GREY, WITH CALCITE, UNWEATHERED. NOTE: SOME FINE POWDERY COAL WASHED AWAY. OCCASIONAL STONE BANDS
164.15	1.56	84	76	100% COAL, BRIGHT	BLACK, WITH CALCITE, UNWEATHERED. NOTE: SOME FINE POWDERY COAL WASHED AWAY. OCCASIONAL STONE BANDS
				BASE OF DALMAYNE D : THICKNESS= 1.62 M; SAMPLED THICKNESS= 1.56 M	
164.44	0.29	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED. NOTE: FIRST 4CM IS CARBONACEOUS (GRADATION FROM COAL ZONE)
165.01	0.57	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
183.77	18.76	100		100% SANDSTONE	MED.-COARSE GRAINED, COALY, GREY, UNWEATHERED. NOTE: MINOR OCCURRENCES OF MUDSTONE. SANDSTONE COARSER WITH DEPTH
184.02	0.25	100		100% COAL	MUDSTONE, SANDSTONE, DARK GREY, UNWEATHERED.
199.61	15.59	100		100% SANDSTONE	COALY, LAMINAE, GREY, UNWEATHERED. NOTE: COAL BANDS UP TO 1.5CM THICK. MUDSTONE FRAGMENTS PRESENT
201.41	1.80	100		100% MUDSTONE	UNWEATHERED, LAMINATED.
202.23	0.82	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, UNWEATHERED, BEDS DIP 3 DEG., LAMINATED, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE E : 214.17 M R.L.	
202.95	0.72	100		100% COAL	SANDSTONE, STREAKS, BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: MUDDY
				BASE OF DALMAYNE E : THICKNESS= 0.72 M; SAMPLED THICKNESS= 0.00 M	
203.70	0.75	100		100% SANDSTONE	GRADING TO, MUDSTONE, GREY, UNWEATHERED. NOTE: MINOR FINE BANDS OF CARBONACEOUS MUDSTONE IN FIRST 32CM
205.18	1.48	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED, WITH PLANT REMAINS. NOTE: MUDSTONE PREDOMINATING
206.07	0.89	100		100% SANDSTONE	MUDSTONE, LAMINAE, GREY, UNWEATHERED. NOTE: LAMINATED LAST 30CM WITH CARBONACEOUS STREAKS
209.48	3.41	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, GREY, UNWEATHERED.
210.91	1.43	100		100% COAL	MUDSTONE, ARGILLACEOUS, BLACK, UNWEATHERED. NOTE: FIRST 14CM OF BETTER QUALITY COAL BECOMING MUDDY
215.54	4.63	100		100% MUDSTONE	FINE GRAINED SANDSTONE, COALY, GREY, WITH CALCITE, UNWEATHERED. NOTE: MINOR FINE BANDS AND STREAKS OF COAL AND CARBONACEOUS MUDSTONE. MUDSTONE GRADES TO SANDY MUDSTONE WITH CARBONACEOUS MATERIAL OVER LAST 67CM
215.94	0.40	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, LAMINAE, GREY, UNWEATHERED. NOTE: TRANSITION FROM PREVIOUS ZONE
217.77	1.83	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, GREY, UNWEATHERED.
218.02	0.25	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED.
225.56	7.54	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, GREY, UNWEATHERED. NOTE: SANDSTONE IS SOFT AND CRUMBLY IN PART (E.G. 220.03M TO 225.56M)
227.13	1.57	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY, UNWEATHERED. NOTE: MUDDY COAL FOR LAST 14CM
228.60	1.47	100		100% SANDSTONE	COALY, BANDS, GREY, UNWEATHERED. NOTE: WITH FINE BANDS OF CARBONACEOUS MUDSTONE. SANDSTONE COARSER WITH DEPTH. MUDSTONE LESS COMMON WITH DEPTH. COAL MORE COMMON WITH DEPTH. FIRST 70CM TRANSITION FROM PREVIOUS ZONE
231.44	2.84	100		100% SANDSTONE	GREY, UNWEATHERED.
				TOP OF DALMAYNE F : 184.96 M R.L.	
232.54	1.10	100		100% COAL	SANDSTONE, BANDS, BLACK, UNWEATHERED. NOTE: BRIGHT COAL FOR FIRST 9CM. CARBONACEOUS MUDSTONE BANDS ALSO. SANDSTONE BANDS INCREASE WITH DEPTH. COAL VARIES IN QUALITY
				BASE OF DALMAYNE F : THICKNESS= 1.10 M; SAMPLED THICKNESS= 0.00 M	
232.76	0.22	100		100% SANDSTONE	COALY, BANDS, GREY, UNWEATHERED. NOTE: MUDDY COAL (?) BANDS (POSSIBLY CARBONACEOUS MUDSTONE)

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
237.39	4.63	100		100% SANDSTONE	COALY, BANDS, BROWN, UNWEATHERED. NOTE: COAL BANDS UP TO 50CM. FRACTURES CONTAIN PUG UP TO 236.27M
238.47	1.08	100		100% SANDSTONE	MUDSTONE, BANDS, GREY, UNWEATHERED.
247.19	8.72	100		100% SANDSTONE	COALY, BANDS, BROWN, UNWEATHERED. NOTE: THE SANDSTONE IS MEDIUM TO COARSE-GRAINED
249.05	1.86	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, FRAGMENTS, LIGHT GREY, UNWEATHERED. NOTE: COAL BANDS AND FRAGMENTS
251.48	2.43	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED. NOTE: FINER-GRAINED THAN ABOVE WITH COARSER ZONE IN FIRST METRE
252.18	0.70	100		100% COAL	BLACK, WITH CALCITE, UNWEATHERED.
254.67	2.49	100		50% MUDSTONE 50% MUDSTONE	COALY, GREY. SILICEOUS, GREY. UNWEATHERED. NOTE: MINOR CARBONACEOUS MUDSTONE. LAMINATED IN PART
255.36	0.69	100		100% SANDSTONE	GRADING TO, COARSE GRAINED, GREY, UNWEATHERED. NOTE: FINE COAL BANDS
255.61	0.25	100		100% CARBONACEOUS MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED.
256.78	1.17	100		100% SANDSTONE	GRADING TO, COARSE GRAINED, GREY, UNWEATHERED.
256.94	0.16	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: SAND-GRAIN BANDS DOMINATE THE LAST 9CM OF CORE
257.00	0.06	100		100% COAL	BLACK, WITH CALCITE, UNWEATHERED. NOTE: BRIGHT FOR FIRST 3CM. SANDSTONE AND MUDSTONE FOR LAST 3CM
259.23	2.23	100		100% MUDSTONE	GREY, UNWEATHERED. NOTE: SHEARED AND FRACTURED WITH PUG IN FRACTURES
260.03	0.80	63		100% MUDSTONE	GREY, UNWEATHERED. NOTE: FAULTING. 30CM CORE LOST. FAULT VISIBLE 259.53M TO 259.63M
260.60	0.57	100		100% MUDSTONE	LAMINAE, SILICEOUS, GREY, UNWEATHERED. NOTE: CARBONACEOUS MUDSTONE PRESENT. LAST 30CM CONTAINS SANDSTONE BANDS
260.89	0.29	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED. NOTE: FRACTURES PRESENT
261.76	0.87	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, DARK GREY, UNWEATHERED. NOTE: POOR-QUALITY MUDDY COAL WITH SANDSTONE BANDS. OCCASIONAL STREAKS OF BRIGHT COAL. FIRST 22CM CONTAINS LITTLE CARBONACEOUS MATERIAL
261.82	0.06	100		100% SANDSTONE	GRADING TO, CONGLOMERATIC, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: MUDSTONE ALSO PRESENT
261.95	0.13	100		100% SANDSTONE	MUDSTONE, FRAGMENTS, GREY, WITH CALCITE, UNWEATHERED.
263.43	1.48	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, LAMINATED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					NOTE: CORE FRACTURED AND SHATTERED WITH LAMINATIONS PRESENT
264.46	1.03	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED, LAMINATED, WITH CARBONACEOUS WISPS. NOTE: TRANSITION ZONE
264.69	0.23	100		100% SANDSTONE	COALY, STREAKS, UNWEATHERED. NOTE: SANDY MUDSTONE FRAGMENTS IN LAST 4CM
265.07	0.38	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED.
265.43	0.36	100		100% SANDSTONE	CALCITIC, GREY, UNWEATHERED. NOTE: CRYSTALS PRESENT. MINOR CARBONACEOUS MUDSTONE AND MUDDY COAL FRAGMENTS
265.50	0.07	100		100% COAL	SANDSTONE, INTERCALATIONS, GREY, UNWEATHERED. NOTE: SHALE-LIKE
269.75	4.25	100		100% MUDSTONE	LAMINAE, SILICEOUS, GREY, WITH CALCITE, UNWEATHERED. NOTE: SOME SANDY ZONES, PUG AND CARBONACEOUS MATERIAL. COAL PRESENT, FAULTING OBSERVED
269.96	0.21	100		100% MUDSTONE	COALY, LAMINAE, DARK GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: FIRST 2CM THE COAL LAMINAE ARE BRIGHT
270.92	0.96	100		100% MUDSTONE	SILICEOUS, COALY, GREY, WITH CALCITE, UNWEATHERED. NOTE: FAULT ZONE. SHEARED FRAGMENTARY ZONE INCLUDING COAL, PUG, SAND AND SANDY MUDSTONE. FAULT CONTACT HAS 60 DEGREE DIP
271.56	0.64	100		100% MUDSTONE	SILICEOUS, BANDS, LIGHT GREY, WITH CALCITE, UNWEATHERED, LAMINATED. NOTE: FRACTURED
272.42	0.86	100		100% MUDSTONE	COALY, DARK GREY, WITH CALCITE, UNWEATHERED, WITH CARBONACEOUS WISPS, LAMINATED. NOTE: FIRST 20CM FRAGMENTARY. SANDSTONE GRADATION OVER LAST 14CM
272.94	0.52	100		100% SANDSTONE,COARSE GRAINED	COALY, STREAKS, LIGHT GREY, WITH CALCITE, UNWEATHERED. NOTE: STREAKS AND FINE BANDS OF CARBONACEOUS MATERIAL
273.50	0.56	100		100% MUDSTONE	GREY, UNWEATHERED.
273.65	0.15	100		100% COAL	MUDSTONE, CARBONACEOUS, BLACK, WITH CALCITE, UNWEATHERED. NOTE: MUDDY COAL WITH BRIGHT STREAKS
274.05	0.40	100		100% MUDSTONE	SILICEOUS, CARBONACEOUS, GREY, UNWEATHERED. NOTE: INCLUDING COAL, CLAY AND PUG. FAULT VISIBLE (60 DEGREE DIP). BRECCIATED
274.32	0.27	100		100% SANDSTONE,COARSE GRAINED	MUDSTONE, FRAGMENTS, GREY, WITH CALCITE, UNWEATHERED. NOTE: VERY COARSE AT BASE
274.59	0.27	100		100% MUDSTONE	SILICEOUS, LIGHT GREY, UNWEATHERED. NOTE: QUARTZ FRAGMENT
282.05	7.46	100		100% MUDSTONE	CALCITIC, DARK GREY, UNWEATHERED. NOTE: CONSIDERABLE SHEARING AND FAULTING. QUARTZ FRAGMENT FROM

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					279.17M TO 279.20M. PYRITE (?). SHEAR SURFACES SHOW DIPS OF APPROXIMATELY 60 DEGREES
284.00	1.95	100		100% MUDSTONE	SILICEOUS, ARGILLACEOUS, GREY-GREEN, WITH PYRITE, UNWEATHERED. NOTE: ABUNDANT SHELL FRAGMENTS. SHEAR SURFACE DIP OF 60 DEGREES

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DD	1.55 M	159.59 - 161.14 M	1.55 M
DD	1.56 M	162.53 - 164.15 M	1.62 M
DE	0.00 M	202.23 - 202.95 M	0.72 M
DF	0.00 M	231.44 - 232.54 M	1.10 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
65	74.52 - 74.93 M	0.41 M
66	75.04 - 78.03 M	2.99 M
67	78.03 - 79.05 M	1.02 M
68	79.05 - 80.28 M	1.23 M
69	80.28 - 81.53 M	1.25 M
70	94.49 - 95.42 M	0.93 M
71	95.73 - 97.15 M	1.42 M
72	97.15 - 98.96 M	1.81 M
73	98.96 - 99.18 M	0.22 M
74	159.59 - 161.14 M	1.55 M
75	161.14 - 162.53 M	1.39 M
76	162.59 - 164.15 M	1.56 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DDH2

HOLE TYPE	CORE
EASTING	602,247 M AM GRID
NORTHING	5,384,347 M AM GRID
ELEVATION	412.10 M
TOTAL DEPTH DRILLED	199.95 M
DRILLING STARTED	5/ 8/74
DRILLING TIME	
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	

INFORMATION AVAILABLE : LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
9.75	9.75	38		100% DOLERITE	SCREE, ARGILLACEOUS, LIGHT GREY, MODERATELY WEATHERED.
13.82	4.07	25		100% DOLERITE	SCREE, SILTY, LIGHT GREY, MODERATELY WEATHERED. NOTE: WATER-WORN GRAVEL. OCCASIONAL DARK GREY PLASTIC MUD WITH PEBBLES
14.69	0.87	81		100% CARBONACEOUS MUDSTONE	MUDSTONE, ARGILLACEOUS, GREY, WITH CALCITE, SLIGHTLY WEATHERED.
15.28	0.59	100		100% CARBONACEOUS MUDSTONE	GRADING TO, COALY, DARK GREY, UNWEATHERED.
23.63	8.35	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, DARK GREY, WITH CALCITE, UNWEATHERED. NOTE: MINOR GREY MUDSTONE AND SAND GRAINS PRESENT. GRADES TOWARDS A MUDDY COAL IN PART
24.40	0.77	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, DARK GREY, WITH BANDS OF CALCITE, UNWEATHERED.
25.91	1.51	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
33.56	7.65	100		100% SANDSTONE	COALY, STREAKS, GREY, WITH FRAGMENTS OF QUARTZ AND FRAGMENTS OF CALCITE, UNWEATHERED.
36.70	3.14	100		100% PEBBLE CONGLOMERATE	COALY, FRAGMENTS, GREY, WITH CALCITE, UNWEATHERED.
36.83	0.13	100		100% COAL	BLACK, WITH CALCITE, UNWEATHERED.
37.12	0.29	100		100% PEBBLE CONGLOMERATE	COALY, FRAGMENTS, GREY, WITH CALCITE, UNWEATHERED.
38.59	1.47	100		100% MUDSTONE	COALY, BANDS, DARK GREY, UNWEATHERED. NOTE: SOFT AND CRUMBLY FOR FIRST 15CM. SANDY
38.71	0.12	100		100% MUDSTONE	SILICEOUS, GREY, UNWEATHERED.
38.94	0.23	100		100% MUDSTONE	SILICEOUS, COALY, GREY, UNWEATHERED. NOTE: CARBONACEOUS MUDSTONE OCCURRENCES
41.02	2.08	100		100% MUDSTONE	SILICEOUS, GREY, UNWEATHERED.
41.30	0.28	100		100% MUDSTONE	SILICEOUS, COALY, GREY, UNWEATHERED. NOTE: CARBONACEOUS MUDSTONE OCCURRENCES
41.37	0.07	100		100% MUDSTONE	SILICEOUS, GREY, UNWEATHERED.
41.86	0.49	100		100% MUDSTONE	SILICEOUS, COALY, GREY, UNWEATHERED. NOTE: CARBONACEOUS MUDSTONE OCCURRENCES
44.55	2.69	100		100% MUDSTONE	SILICEOUS, MUDSTONE, GREY, UNWEATHERED, LAMINATED.
45.09	0.54	100		100% MUDSTONE	SILICEOUS, COALY, GREY, UNWEATHERED.
45.31	0.22	100		100% COAL	BLACK, UNWEATHERED.
45.36	0.05	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED.
50.40	5.04	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, LAMINATED. NOTE: SANDY IN PART. OCCASIONAL CARBON CONTENT PRESENT IN DARKER MUDSTONE. SOME PUG

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.00	3.60	100		100% COAL	BLACK, UNWEATHERED.
54.20	0.20	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED. NOTE: FIRST FEW CM IS A TRANSITION ZONE FROM COAL
58.01	3.81	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, LAMINATED. NOTE: TRANSITION ZONE
60.62	2.61	100		100% SANDSTONE,FINE GRAINED	GRADING TO, COARSE GRAINED, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
70.18	9.56	100		50% MUDSTONE 50% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY. BRIGHT COAL, LAMINAE, DARK GREY. UNWEATHERED, LAMINATED, WITH CARBONACEOUS WISPS. NOTE: COARSER SANDSTONE WITH MUDSTONE AND FINE BANDS OF BRIGHT COAL FROM 64.47M TO 65.14M
72.51	2.33	100		100% SANDSTONE	COALY, STREAKS, GREY, UNWEATHERED. NOTE: MUDSTONE FRAGMENTS
72.64	0.13	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, INTERCALATIONS, GREY, UNWEATHERED, LAMINATED.
72.79	0.15	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED. NOTE: MUDDY COAL (?)
73.01	0.22	100		100% COAL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED.
73.14	0.13	100		100% COAL	MUDSTONE, INTERCALATIONS, DARK GREY, UNWEATHERED. NOTE: BANDS OF CARBONACEOUS MUDSTONE ALSO
74.73	1.59	100		100% MUDSTONE	SILICEOUS, INTERCALATIONS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS, LAMINATED. NOTE: OCCASIONAL STREAKS OF MUDDY COAL
75.04	0.31	100		100% COAL	ARGILLACEOUS, CARBONACEOUS, BLACK, UNWEATHERED. NOTE: CARBONACEOUS MUDSTONE PRESENT
75.40	0.36	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED.
76.83	1.43	100		100% MUDSTONE	GRADING TO, SANDSTONE, GREY, UNWEATHERED. NOTE: TRANSITION ZONE
78.35	1.52	100		100% SANDSTONE	MUDSTONE, FRAGMENTS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
78.64	0.29	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, INTERCALATIONS, GREY, UNWEATHERED.
84.38	5.74	100		100% MUDSTONE	SILICEOUS, INTERCALATIONS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS, LAMINATED. NOTE: GRADES TO FINE SANDSTONE. SANDSTONE BANDS IN LAST 14CM
84.88	0.50	100		100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, LAMINATED. NOTE: SANDY MUDSTONE AND CARBONACEOUS MUDSTONE LAMINAE
87.57	2.69	100		100% MUDSTONE	GRADING TO, SILICEOUS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS, LAMINATED.
89.99	2.42	100		100% MUDSTONE	SILICEOUS, INTERCALATIONS, GREY, UNWEATHERED. NOTE: TRANSITION ZONE

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
100.13	10.14	100		100% SANDSTONE	MUDSTONE, LAMINAE, GREY, UNWEATHERED. NOTE: OCCASIONAL STREAKS AND FRAGMENTS OF COAL AND FRAGMENTS OF MUDSTONE
104.89	4.76	100		100% SANDSTONE	COALY, BANDS, LIGHT GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
105.30	0.41	100	77	100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
105.47	0.17	100		100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
107.52	2.05	100	78	100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
108.76	1.24	100	79	100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
108.84	0.08	100		100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
111.15	2.31	100	80	100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
112.24	1.09	100	81	100% COAL	SHALY, MUDSTONE, DARK GREY, WITH CALCITE, UNWEATHERED, BEDS DIP 3 DEG. NOTE: BANDED COAL SEAM (MAINLY POOR QUALITY COAL)
115.13	2.89	100		100% MUDSTONE	GRADING TO, SILICEOUS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: CARBONACEOUS MATERIAL IN FIRST FEW CM
127.04	11.91	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: FAULT FROM 124.84M TO 125.84M (BRECCIATED SANDSTONE)
127.45	0.41	100		100% COAL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS. NOTE: BANDED COAL SEAM (MUDDY TO SHALY TO BRIGHT). MUDSTONE AND CLAY PRESENT
129.12	1.67	100	82	100% COAL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS. NOTE: BANDED COAL SEAM (MUDDY TO SHALY TO BRIGHT). MUDSTONE AND CLAY PRESENT
129.21	0.09	100		100% COAL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS. NOTE: BANDED COAL SEAM (MUDDY TO SHALY TO BRIGHT). MUDSTONE AND CLAY PRESENT
130.44	1.23	100	83	100% COAL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS. NOTE: BANDED COAL SEAM (MUDDY TO SHALY TO BRIGHT). MUDSTONE AND

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
					CLAY PRESENT
131.66	1.22	100	84	100% COAL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS. NOTE: BANDED COAL SEAM (MUDDY TO SHALY TO BRIGHT). MUDSTONE AND CLAY PRESENT
132.63	0.97	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, DARK GREY, UNWEATHERED. NOTE: TRANSITION FROM COAL
185.32	52.69	100		100% SANDSTONE	MUDSTONE, BANDS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: OCCASIONAL STREAKS AND BANDS OF BRIGHT COAL
185.44	0.12	100		100% SANDSTONE	MUDSTONE, BANDS, GREY, WITH CRYSTALLINE PYRITE, UNWEATHERED. NOTE: SOFT BROWN CARBONACEOUS MUDSTONE (LIGNITE ?)
192.62	7.18	100		100% SANDSTONE	MUDSTONE, BANDS, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
				TOP OF DALMAYNE D : 219.48 M R.L.	
192.94	0.32	15		100% COAL	BLACK, UNWEATHERED. NOTE: SOFT AND CRUMBLY
193.86	0.92	89	85	100% COAL, BRIGHT	BLACK, UNWEATHERED, BEDS DIP 3 DEG. NOTE: FRAGMENTARY IN PART
194.76	0.90	89	86	100% COAL, BRIGHT	BLACK, UNWEATHERED, BEDS DIP 3 DEG. NOTE: FRAGMENTARY IN PART
				BASE OF DALMAYNE D : THICKNESS= 2.14 M; SAMPLED THICKNESS= 1.82 M	
196.29	1.53	10		100% MUDSTONE	ARGILLACEOUS, CARBONACEOUS, GREY, UNWEATHERED. NOTE: OCCASIONAL COAL FRAGMENTS. CONSIDERABLE CORE LOST (PROBABLY CLAY)
197.24	0.95	4		100% COAL	BLACK, UNWEATHERED. NOTE: GOOD QUALITY THROUGHOUT (INDICATED BY WATER RETURN)
197.47	0.23	100		100% MUDSTONE	GREY, UNWEATHERED. NOTE: CARBONACEOUS ON TRANSITION FROM COAL ZONE
199.95	2.48	100		100% SANDSTONE,FINE GRAINED	GRADING TO, COARSE GRAINED, GREY, UNWEATHERED, WITH CARBONACEOUS WISPS. NOTE: HOLE TERMINATED

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DD	1.82 M	192.62 - 194.76 M	2.14 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
77	104.89 - 105.30 M	0.41 M
78	105.47 - 107.52 M	2.05 M
79	107.52 - 108.76 M	1.24 M
80	108.84 - 111.15 M	2.31 M
81	111.15 - 112.24 M	1.09 M
82	127.45 - 129.12 M	1.67 M
83	129.21 - 130.44 M	1.23 M
84	130.44 - 131.66 M	1.22 M
85	192.94 - 193.86 M	0.92 M
86	193.86 - 194.76 M	0.90 M

THE SHELL COMPANY OF AUSTRALIA LTD.

RAW COAL PLY ANALYSIS

GRAY

APPENDIX E1 RAW COAL PLY ANALYSIS

THE SHELL COMPANY OF AUSTRALIA LTD.

RAW COAL PLY ANALYSIS

LEGEND

TOTAL MOISTURE BASIS

	Air Dried
A	As Received
T	Total
B	Bed
Q	Equilibrium
E	Estimated Value

INHERENT MOISTURE BASIS

	Air Dried
E	Estimated Value

TOTAL SULPHUR BASIS

	Air Dried
A	As Received
R	Dry Basis

ASH/VOLATILE MATTER/FIXED CARBON BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free
E	Estimated Value

SPECIFIC ENERGY BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free

INTERVAL MARKER CODE

Cols 1-2: Member/Marker
Col 3: Subseam
Col 4: Seam Split
Col 5: Subsplit

U8	- MT. NICHOLAS UPPER 8
M1	- MT. NICHOLAS MIDDLE 1
M2	- MT. NICHOLAS MIDDLE 2
M3	- MT. NICHOLAS MIDDLE 3
L1	- MT. NICHOLAS LOWER 1
L2	- MT. NICHOLAS LOWER 2
DA	- DALMAYNE A
DB	- DALMAYNE B
DC	- DALMAYNE C
DD	- DALMAYNE D
DDU	- DALMAYNE D UPPER
DDM	- DALMAYNE D MIDDLE
DDL	- DALMAYNE D LOWER
D2	- HAREFIELD 2
D3	- HAREFIELD 3
D4	- HAREFIELD 4
DE	- DALMAYNE E
DE2	- DALMAYNE E2
DE3	- DALMAYNE E3
DF	- DALMAYNE F

SAMPLE NUMBER

* Not Sampled - Assumed Analysis

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY1

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	206.98	1.68	1.46				22.9					
2		207.12	0.14	1.64				41.4					
3		254.28	0.10	2.09				71.2					
4	DE2	256.48	2.20	1.57				33.6					
5		256.64	0.16	1.93				65.8					
6		282.64	0.44	1.95				65.8					
7	DF	283.52	0.88	1.59				35.3					
1	DDL	206.98	1.68	1.46			4.4	22.9	22.2	50.5	0.41	23.88	
6		282.64	0.44	1.95			1.3	65.8	15.2	17.7			

SIGNATURE :

*** FRAME C01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY2

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		259.80	0.07	2.37				83.5					
2	DB	260.44	0.64	1.58				35.2					
3	DB	261.97	1.53	2.18				69.0					
4	DB	262.96	0.99	1.68				42.0					
5	DB	264.09	1.13	1.65				40.7					
6	DC	289.38	0.89	2.12				71.5					
7	DC	290.93	1.55	1.67				41.9					
8	DC	291.84	0.91	1.94				58.4					
9	DDL	357.84	0.78	1.65				39.3					
10	DDL	359.85	2.01	1.48				24.3					
11	DDL	359.94	0.09	1.83				55.7					
12		406.56	0.51	1.97			4.9	63.1	13.3	18.7			
13	DE2	407.32	0.76	1.66				43.5					
14	DF	433.18	0.50	1.73				41.8					
15		346.22	0.28	2.14				69.1					
16	DDU	347.45	1.23	1.42				18.8					
17	DDU	348.11	0.66	2.32				86.3					
18	DDU	348.55	0.44	1.45				21.4					
3	DB	261.97	1.53	2.18			2.8	69.0	13.3	14.9			
9	DDL	357.84	0.78	1.65			2.1	39.0	22.4	36.5	0.29	18.34	
10	DDL	359.85	2.01	1.48			2.2	24.5	25.0	48.3	0.37	23.90	
16	DDU	347.45	1.23	1.42			3.0	18.8	26.7	51.5	0.32	26.14	
15+16	DDU	347.45	1.51				2.2	32.1	24.2	41.5	0.28	21.16	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY3

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDU	361.96	0.99	1.83				53.4					
2	DDU	363.82	1.86	1.40				17.0					
3	DDL	377.30	0.62	1.53				29.1					
4	DDL	379.50	2.20	1.46				22.2					
5		440.32	0.55	1.81				49.7					
6	DF	441.03	0.71	1.54				28.6					
2	DDU	363.82	1.86	1.40			4.2	17.2	28.5	50.1	0.35	26.15	
3	DDL	377.30	0.62	1.50			4.1	29.3	24.8	41.8	0.27	22.40	
4	DDL	379.50	2.20	1.46			4.5	22.6	25.2	47.7	0.29	24.35	

SIGNATURE :

*** FRAME E01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY4

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DB	216.17	1.12	1.57				38.0					
2	DB	216.75	0.58	1.89				65.2					
3	DB	217.54	0.79	1.51				33.0					
4	DB	217.88	0.34	2.06				78.0					
5	DB	219.34	1.46	1.65				42.2					
6		302.15	0.30	1.62				48.1					
7	DDU	303.92	1.77	1.40				21.6					
8		317.08	0.08	2.03				74.9					
9	DDL	318.52	1.44	1.53				30.0					
7	DDU	303.92	1.77	1.40			4.4	21.7	24.9	49.0	0.34	24.83	
9	DDL	318.52	1.44	1.53			5.3	29.9	20.8	44.0	0.30	20.74	

SIGNATURE :

*** FRAME F01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GT5

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		263.18	0.34	1.34				14.9					
2		263.76	0.58	2.22				81.6					
3	DC1	264.56	0.80	1.49				27.3					
4	DC1	264.83	0.27	2.22				81.5					
5	DC1	266.00	1.17	1.44				26.0					
6		367.70	0.13	2.17				70.6					
7	DE2	368.49	0.79	1.44			3.1	23.1	28.1	45.7	0.48	24.25	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY6A

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		262.95	0.45	1.80				50.6					
2	DE2	263.92	0.97	1.52				29.9					
3	DF	286.95	0.90	1.67				39.9					

SIGNATURE :

*** FRAME H01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY7

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		207.25	1.51	1.62				38.6					
2	DB	254.60	1.08	1.67				41.0					
3	DC	281.76	1.03	1.60				37.4					
4	DC1	314.32	0.49	1.70				46.9					
5	DC1	315.56	1.24	1.45				22.0					
6	DC1	316.43	0.87	1.78				51.5					
7		316.62	0.19	2.16				73.4					

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY8

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		152.85	2.20	1.62				38.4					

SIGNATURE :

*** FRAME J01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GT9

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS				TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
							INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %			
1	DS	187.19	0.86	2.03				71.8					
2	DB	187.98	0.79	1.77				52.5					
3	DB	189.07	1.09	2.05				66.4					
4	DB	190.15	1.08	1.97				57.6					
5	DS	190.29	0.14	2.29				80.9					
6	DDU	269.41	1.39	1.43				20.3					
7		269.68	0.27	1.76				53.0					
8	DDL	284.51	1.01	1.50				27.0					
9		336.61	0.35	2.08				66.5					
10	DE2	337.68	1.07	1.43				20.1					
6	DDU	269.41	1.39	1.43			4.0	20.5	27.0	48.5	0.33	25.41	
8	DDL	284.51	1.01	1.50			4.6	26.8	22.1	46.5	0.30	22.45	
10	DE2	337.68	1.07	1.43			3.3	20.3	27.7	48.7	0.42	25.71	

SIGNATURE :

*** FRAME K01***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY10

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DB	289.84	0.92	1.73				50.9					
2	DB	290.91	1.07	2.02				68.3					
3	DB	292.71	1.80	1.76				50.2					
4	DB	295.95	3.24	1.98				71.9					
5	DB	297.16	1.21	1.77				52.2					
6	DB	297.95	0.79	2.22				78.2					
7	DC	311.96	0.89	2.02				60.7					
8	DC	313.98	2.02	1.87				54.6					
9	DBU	365.64	1.26	1.59				33.1					

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY11

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		264.60	2.20	1.62				38.8					
2	DDU	311.23	1.27	1.49				26.0					
							4.9	26.5	36.2	32.4	0.36	23.06	
3		325.97	1.33	1.93				60.0					
4	DDL	327.40	1.43	1.47				23.7					
5	DE2	381.24	0.89	1.47				23.7					
4	DDL	327.40	1.43	1.47			4.9	24.0	23.1	48.0	0.34	23.32	
5	DE2	381.24	0.89	1.47			5.6	23.7	27.4	43.3	0.49	23.59	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY12

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DB	295.41	0.70	2.18				72.1					
2	DB	297.60	2.19	1.87				54.9					
3	DB	299.13	1.53	1.95				65.4					
4	DB	300.87	1.74	2.07				70.8					
5	DB	301.62	0.75	1.62				44.4					
6		375.45	1.19	1.65				48.2					
7		376.78	1.33	2.36				80.3					
8	DD	378.64	1.86	1.52				29.3					
9	DD	379.38	0.74	1.81				51.4					
8	DD	378.64	1.86	1.52			3.0	28.5	25.5	43.0	0.30	21.87	
10	DD	380.31	0.93	2.41				78.6					
11	DD	381.52	1.21	1.50				26.7					
12	DE2	443.74	0.72	1.54				30.7					
11	DD	381.52	1.21	1.50			3.1	25.8	24.0	47.1	0.34	22.88	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY14

SAMPLE SIZE : - 38.1 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DB	182.41	1.43	2.10				76.9					
2	DB	183.00	0.59	2.16				82.0					
3	DB	185.15	2.15	2.09				75.3					
4	DB	188.05	2.90	2.37				92.0					
5	DB	191.12	3.07	2.16				81.7					
6	DC	207.38	4.82	2.00				73.0					
15		331.91	0.99	2.15				68.7					
Composite of Samples 7-9													
	DDU	287.29	1.19	1.54			4.2	29.4	24.8	41.6	0.24	21.92	
Composite of Samples 10-13													
	DDL	281.30	2.59	1.63			3.9	37.0	22.5	36.6	0.21	18.64	
14	DE2	330.91	1.15	1.61			4.1	36.1	19.9	39.9	0.21	18.71	

SIGNATURE :

*** FRAME CO2***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY17

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDU	468.27	1.52	1.54				29.1					
2		481.54	1.19	2.06				67.6					
3	DDL	483.49	1.95	1.52				24.6					
1	DDU	468.27	1.52	1.54			3.8	29.2	24.3	42.7	0.33	22.13	
3	DDL	483.49	1.95	1.52			4.0	24.4	23.8	47.8	0.35	23.77	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY18

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DD	219.14	0.85	1.36				13.1					
2	DD	222.80	1.51	1.48				24.9					
1	DD	219.14	0.85	1.36			4.1	13.1	32.5	50.3	0.38	27.65	
2	DD	222.80	1.51	1.48			5.0	25.0	22.8	47.2	0.29	23.03	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY20

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	436.41	2.06	1.53				22.8			0.24	24.61	
2		438.24	1.83	2.46				85.7					
3	DDL	438.95	0.71	1.57				31.5				20.76	

SIGNATURE :

*** FRAME F02***

P// COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY21

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		284.72	0.72	2.22				77.1					
2	DDL	285.90	1.18	1.82				50.2				13.67	
3	DDL	289.34	0.77	1.59				30.2				21.08	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY22

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	215.47	0.79	1.58				30.7				21.62	

SIGNATURE :

RAW COAL FLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY23

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		337.56	0.08	2.50				91.1					
2	DDL	338.76	1.20	1.55			4.7	28.1				21.86	
3		341.05	0.20	2.26				75.7				4.36	
4	DDL	342.24	1.19	1.58				31.2				21.25	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY25

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	475.17	1.33	1.59			2.7	32.9				21.02	
2	DDL	475.33	0.16	2.04				75.8					
3		477.01	1.68	1.50			3.3	24.6				23.15	
4	DDL	478.12	1.11	1.64			2.4	40.6				16.22	
5	DDL	479.34	1.22	1.59			3.1	34.7				20.02	
Analysed Composite (1) of Samples 4,5													
	DDL	479.34	2.33	1.62				36.3					
6		479.59	0.25	2.17				72.1					

SIGNATURE :

*** FRAME J02***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY27

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	349.19	2.03	1.49			3.8	24.8				23.60	
2	DDL	351.16	1.97	1.54			5.7	29.4				21.21	

SIGNATURE :

*** FRAME K02***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY29

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	281.58	1.55	1.56			3.6	31.8				21.17	
2	DDL	281.88	0.30	2.50				89.7					
3	DDL	282.12	0.24	1.54			3.5	35.4				20.26	
4		285.28	0.65	1.72			4.6	47.3				14.95	
5		285.80	0.52	2.17				72.7					
6	DDL	287.24	1.44	1.61			3.7	40.0				18.11	
7		287.43	0.19	2.38				86.3					

SIGNATURE :

*** FRAME L02***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY30

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DD	266.79	2.73	1.54			5.1	32.3				19.77	
2	DD	267.45	0.66	1.72			4.6	53.1				12.70	
3	DD	268.10	0.65	2.08			4.4	66.9				7.34	
4	DD	269.32	1.22	1.47			5.7	23.5				22.96	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY32

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DE	200.93	1.34	1.72			5.9	39.1				16.41	
2	DE	201.72	0.79	1.82			4.4	52.0				11.94	

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY103

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	224.50	0.53	1.47				26.0					
2	DDL	225.86	1.36	1.64				36.2					

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY104

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1	DDL	158.88	0.55	1.49				29.6					
2	DDL	160.06	1.18	1.54				38.2					

SIGNATURE :

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY105

SAMPLE SIZE : - 5.6 + 0.0 MM

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
A1	DDL	333.34	1.09	1.52			2.1	21.7	24.7	51.5			
A2	DDL	333.86	0.52	2.40			4.1	86.2					
A3	DDL	334.04	0.18	2.00			2.5	65.2					
A4	DDL	334.35	0.31	1.54			2.4	24.4	25.7	47.5			
A5	DDL	334.38	0.03	2.25			2.5	71.6					
A6	DDL	335.63	1.25	1.47			2.3	21.3	26.7	49.7			
A7	DDL	336.04	0.41	2.55			2.7	90.6					
A8	DDL	336.38	0.34	1.89			2.6	54.4					
A9	DDL	336.54	0.16	1.46			2.0	20.8	30.2	47.0			
10	DDL	336.58	0.04	2.41			2.0	81.5					
11	DDL	337.50	0.92	1.63			2.4	37.9					
12		332.25	0.15	2.60			0.4	97.4					
13		337.60	0.10	2.59			2.5	90.9					
Calculated Composite (INCBFL) of Samples A1-11													
	DDL	337.50	5.25	1.75			2.6	46.0					
Calculated Composite of Samples A1,A4,A6,A9,11													
	DDL	337.50	3.73	1.53			2.3	26.0					

SIGNATURE :

*** FRAME E03***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symboi between Brackets)

BOREHOLE : GYDRA

SAMPLE SIZE :

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
3		0.34	0.33	1.53			4.5	22.7	21.9	50.9	0.28	23.48	
4		0.69	0.35	1.57			4.6	26.1	24.5	44.8	0.30	22.55	
5	DDL	1.16	0.47	1.54			3.9	24.4	26.8	44.9	0.35	22.82	
6	DDL	1.27	0.11	1.96				64.2					
7	DDL	1.53	0.26	1.63			3.8	34.9	22.2	39.1	0.28	19.65	
8	DDL	1.88	0.35	1.54			3.1	28.9	27.4	40.6	0.33	22.10	
9	DDL	1.97	0.09	1.63			3.2	31.3	30.7	34.8	0.48	20.83	
10	DDL	2.36	0.39	1.46			3.4	22.2	30.3	44.1	0.41	24.87	
11	DDL	2.52	0.16	1.58			3.4	36.0	28.8	31.8	0.36	19.36	
Analysed Composite of Samples 3-11,													
	DDL	2.52	2.51	1.56				29.0					
Analysed Composite ( ) of Samples 3-5,7-11,													
				1.54			3.8	27.0	26.2	43.0	0.34	22.41	

SIGNATURE :

*** FRAME F03***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA1

SAMPLE SIZE :

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
1		2.52	2.51	1.55	113.90		4.6	30.2	24.7	40.5			

SIGNATURE :

*** FRAME G03***

RAW COAL PLY ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA2

SAMPLE SIZE :

SAMPLE NUMBER	SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE RELATIVE DENSITY	SAMPLE MASS KG	TOTAL MOISTURE %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	SPECIFIC ENERGY (MJ/KG)	CRUCIBLE SWELLING NUMBER
2		2.52	2.51	1.58	100.84		3.7	31.8	24.2	40.3			

SIGNATURE :

*** FRAME H03***

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHABILITY ANALYSIS

GRAY

APPENDIX E2 WASHABILITY ANALYSIS

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHABILITY ANALYSIS

LEGEND

SAMPLE STATE

Col 1-11:	Wet Tumbled	
	Dry Tumbled	
	Broken	Broken - Not Tumbled
	Wet Scr Fr	Broken - Wet Screened Fractional
	Wet Screen	Broken - Wet Screened
	Froth Conc.	Froth Flotation Concentrates
	Tailings	
Col 12:	blank	
Col 13:	S	Sink Fraction
Col 14-17:	N.NN	Separation Relative Density
Col 18:	-	
Col 19:	F	Float Fraction
Col 20-23:	N.NN	Separation Relative Density

INTERVAL MARKER CODE

Col 1-2: Member/Marker
Col 3: Subseam
Col 4: Seam Split
Col 5: Subsplit

U8 - MT. NICHOLAS UPPER 8
M1 - MT. NICHOLAS MIDDLE 1
M2 - MT. NICHOLAS MIDDLE 2
M3 - MT. NICHOLAS MIDDLE 3
L1 - MT. NICHOLAS LOWER 1
L2 - MT. NICHOLAS LOWER 2
DA - DALMAYNE A
DB - DALMAYNE B
DC - DALMAYNE C
DD - DALMAYNE D
DDU - DALMAYNE D UPPER
DDM - DALMAYNE D MIDDLE
DDL - DALMAYNE D LOWER
D2 - HAREFIELD 2
D3 - HAREFIELD 3
D4 - HAREFIELD 4
DE - DALMAYNE E
DE2 - DALMAYNE E2
DE3 - DALMAYNE E3
DF - DALMAYNE F

INHERENT MOISTURE BASIS

Air Dried
E Estimated Value

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY1

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	206.98	1.68	- 12.7 + 0.0	Broken	F1.50	77.0	16.9		77.0	16.9	
					S1.50-F1.60	9.6	28.4		86.6	18.2	
					S1.60-F1.70	4.3	36.4		90.9	19.0	
					S1.70-F1.80	2.0	45.7		92.9	19.6	
					S1.80	7.1	73.7		100.0	23.5	
Sample 4											
DE2	256.48	2.20	- 12.7 + 0.0	Broken	F1.50	40.4	13.9		40.4	13.9	
					S1.50-F1.60	11.5	28.6		51.9	17.2	
					S1.60-F1.70	14.3	37.1		66.2	21.5	
					S1.70-F1.80	12.4	45.9		78.6	25.3	
					S1.80	21.4	65.6		100.0	33.9	
Sample 6											
	282.64	0.44	- 12.7 + 0.0	Broken	F1.50	0.8	10.7		0.8	10.7	
					S1.50-F1.70	0.7	27.8		1.5	18.7	
					S1.70-F2.00	22.3	54.2		23.8	52.0	
					S2.00	76.2	70.8		100.0	66.3	
Sample 7											
DF	283.52	0.88	- 12.7 + 0.0	Broken	F1.50	39.9	14.4		39.9	14.4	
					S1.50-F1.70	19.5	28.3		59.4	19.0	
					S1.70-F2.00	24.0	53.2		83.4	28.8	
					S2.00	16.6	72.1		100.0	36.0	

SIGNATURE :

*** FRAME K03***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY2

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 2											
DB	260.44	0.64	- 12.7 + 0.0	Broken	F1.50	31.0	17.4		31.0	17.4	
					S1.50-F1.60	31.4	29.3		62.4	23.4	
					S1.60-F1.70	12.4	39.0		74.8	26.0	
					S1.70-F1.80	5.9	46.0		80.7	27.4	
					S1.80	19.3	68.6		100.0	35.4	
Sample 3											
DB	261.97	1.53	- 12.7 + 0.0	Broken	F1.50	2.3	24.2		2.3	24.2	
					S1.50-F1.60	2.8	30.7		5.1	27.8	
					S1.60-F1.70	6.2	40.7		11.3	34.9	
					S1.70-F1.80	8.4	48.7		19.7	40.8	
					S1.80	80.3	77.1		100.0	69.9	
Sample 4											
DB	262.96	0.99	- 12.7 + 0.0	Broken	F1.50	31.5	11.8		31.5	11.8	
					S1.50-F1.60	11.7	28.5		43.2	16.3	
					S1.60-F1.70	10.5	37.5		53.7	20.5	
					S1.70-F1.80	8.7	45.6		62.4	24.0	
					S1.80	37.6	73.9		100.0	42.7	
Sample 5											
DB	264.09	1.13	- 12.7 + 0.0	Broken	F1.50	35.8	11.4		35.8	11.4	
					S1.50-F1.60	7.8	31.9		43.6	15.1	
					S1.60-F1.70	10.0	39.2		53.6	19.6	
					S1.70-F1.80	8.5	46.7		62.1	23.3	
					S1.80	37.9	68.6		100.0	40.5	
Sample 7											
DC	290.93	1.55	- 12.7 + 0.0	Broken	F1.50	40.6	9.0		40.6	9.0	
					S1.50-F1.60	4.8	28.3		45.4	11.0	
					S1.60-F1.70	7.0	39.6		52.4	14.9	
					S1.70-F1.80	6.2	47.4		58.6	18.3	
					S1.80	41.4	75.2		100.0	41.9	
Sample 8											
DC	291.84	0.91	- 12.7 + 0.0	Broken	F1.50	21.2	15.2		21.2	15.2	
					S1.50-F1.60	6.0	30.1		27.2	18.5	
					S1.60-F1.70	5.9	39.1		33.1	22.2	
					S1.70-F1.80	3.9	47.3		37.0	24.8	
					S1.80	63.0	76.9		100.0	57.6	
Sample 9											
DDL	357.84	0.78	- 12.7 + 0.0	Broken	F1.50	44.2	16.1		44.2	16.1	
					S1.50-F1.60	8.2	31.7		52.4	18.5	
					S1.60-F1.70	13.1	37.0		65.5	22.2	
					S1.70-F1.80	6.6	45.5		72.1	24.4	
					S1.80	27.9	77.3		100.0	39.1	

SIGNATURE :

*** FRAME L03***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY2

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 10											
DDL	359.85	2.01	- 12.7 + 0.0	Broken	F1.50	68.1	14.7		68.1	14.7	
					S1.50-F1.60	13.4	29.9		81.5	17.2	
					S1.60-F1.70	5.7	38.2		87.2	18.6	
					S1.70-F1.80	2.6	48.5		89.8	19.4	
					S1.80	10.2	69.6		100.0	24.6	
Sample 13											
DE2	407.32	0.76	- 12.7 + 0.0	Broken	F1.50	38.0	17.4		38.0	17.4	
					S1.50-F1.70	18.3	31.7		56.3	22.0	
					S1.70-F2.00	9.6	52.4		65.9	26.5	
					S2.00	34.1	75.1		100.0	43.1	
Sample 14											
DF	433.18	0.50	- 12.7 + 0.0	Broken	F1.50	20.1	14.2		20.1	14.2	
					S1.50-F1.70	26.7	27.6		46.8	21.8	
					S1.70-F2.00	27.0	46.7		73.8	30.9	
					S2.00	26.2	71.3		100.0	41.5	
Sample 16											
DDU	347.45	1.23	- 12.7 + 0.0	Broken	F1.50	86.5	13.1		86.5	13.1	
					S1.50-F1.60	4.1	29.5		90.6	13.8	
					S1.60-F1.70	1.1	36.0		91.7	14.1	
					S1.70-F1.80	1.2	50.7		92.9	14.6	
					S1.80	7.1	80.9		100.0	19.3	
Sample 18											
	348.55	0.44	- 12.7 + 0.0	Broken	F1.50	84.3	15.9		84.3	15.9	
					S1.50-F1.60	6.1	31.0		90.4	16.9	
					S1.60-F1.70	2.3	39.5		92.7	17.5	
					S1.70-F1.80	0.8	47.1		93.5	17.7	
					S1.80	6.5	65.2		100.0	20.8	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY3

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDU	361.96	0.99	- 12.7 + 0.0	Broken	F1.50	36.7	17.8		36.7	17.8	
					S1.50-F1.60	6.3	28.3		43.0	19.3	
					S1.60-F1.70	2.0	38.5		45.0	20.2	
					S1.70-F1.80	3.9	51.3		48.9	22.7	
					S1.80	51.1	83.5		100.0	53.8	
Sample 2											
DDU	363.82	1.86	- 12.7 + 0.0	Broken	F1.50	81.6	11.2		81.6	11.2	
					S1.50-F1.60	8.7	27.4		90.3	12.8	
					S1.60-F1.70	1.6	37.9		91.9	13.2	
					S1.70-F1.80	2.8	47.2		94.7	14.2	
					S1.80	5.3	62.5		100.0	16.8	
Sample 3											
DDL	377.30	0.62	- 12.7 + 0.0	Broken	F1.50	63.1	15.3		63.1	15.3	
					S1.50-F1.60	11.9	28.5		75.0	17.4	
					S1.60-F1.70	3.4	37.4		78.4	18.3	
					S1.70-F1.80	2.7	47.4		81.1	19.2	
					S1.80	18.9	74.9		100.0	29.8	
Sample 4											
DDL	379.50	2.20	- 12.7 + 0.0	Broken	F1.50	69.0	13.2		69.0	13.2	
					S1.50-F1.60	12.4	27.7		81.4	15.4	
					S1.60-F1.70	5.0	35.5		86.4	16.6	
					S1.70-F1.80	5.1	47.2		91.5	18.3	
					S1.80	8.5	67.0		100.0	22.4	
Sample 5											
	440.32	0.55	- 12.7 + 0.0	Broken	F1.50	8.5	17.2		8.5	17.2	
					S1.50-F1.70	29.2	28.9		37.7	26.3	
					S1.70-F2.00	26.6	50.5		64.3	36.3	
					S2.00	35.7	75.2		100.0	50.2	
Sample 6											
DF	441.03	0.71	- 12.7 + 0.0	Broken	F1.50	42.0	14.9		42.0	14.9	
					S1.50-F1.70	30.9	27.7		72.9	20.3	
					S1.70-F2.00	21.7	49.5		94.6	27.0	
					S2.00	5.4	64.3		100.0	29.0	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY4

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DB	216.17	1.12	- 12.7 + 0.0	Broken	F1.50	40.9	17.9		40.9	17.9	
					S1.50-F1.60	17.3	29.4		58.2	21.3	
					S1.60-F1.70	9.1	36.6		67.3	23.4	
					S1.70-F1.80	6.2	45.7		73.5	25.3	
					S1.80	26.5	70.8		100.0	37.3	
Sample 3											
DB	217.54	0.79	- 12.7 + 0.0	Broken	F1.50	57.7	21.7		57.7	21.7	
					S1.50-F1.60	17.3	33.5		75.0	24.4	
					S1.60-F1.70	7.8	39.4		82.8	25.8	
					S1.70-F1.80	3.8	45.8		86.6	26.7	
					S1.80	13.4	69.7		100.0	32.5	
Sample 5											
DB	219.34	1.46	- 12.7 + 0.0	Broken	F1.50	27.5	16.7		27.5	16.7	
					S1.50-F1.60	15.2	30.0		42.7	21.4	
					S1.60-F1.70	17.6	37.3		60.3	26.1	
					S1.70-F1.80	9.7	44.3		70.0	28.6	
					S1.80	30.0	70.7		100.0	41.2	
Sample 7											
DDU	303.92	1.77	- 12.7 + 0.0	Broken	F1.50	77.8	14.7		77.8	14.7	
					S1.50-F1.60	7.9	30.5		85.7	16.2	
					S1.60-F1.70	3.4	41.7		89.1	17.1	
					S1.70-F1.80	2.7	52.0		91.8	18.2	
					S1.80	8.2	56.8		100.0	21.3	
Sample 9											
DDL	318.52	1.44	- 12.7 + 0.0	Broken	F1.50	44.0	19.4		44.0	19.4	
					S1.50-F1.60	27.4	27.6		71.4	22.5	
					S1.60-F1.70	14.3	35.4		85.7	24.7	
					S1.70-F1.80	4.1	44.8		89.8	25.6	
					S1.80	10.2	61.8		100.0	29.3	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY5

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
	263.18	0.34	- 12.7 + 0.0	Broken	F1.50	87.4	10.3		87.4	10.3	
					S1.50-F1.60	6.0	30.7		93.4	11.6	
					S1.60-F1.70	3.0	38.3		96.4	12.4	
					S1.70-F1.80	0.7	51.9		97.1	12.7	
					S1.80	2.9	71.7		100.0	14.4	
Sample 2											
	263.76	0.58	- 12.7 + 0.0	Broken	F1.50	4.8	17.6		4.8	17.6	
					S1.50-F1.60	0.9	30.2		5.7	19.6	
					S1.60-F1.70	1.9	39.7		7.6	24.6	
					S1.70-F1.80	1.8	49.2		9.4	29.3	
					S1.80	90.6	86.2		100.0	80.9	
Sample 3											
DC1	264.56	0.80	- 12.7 + 0.0	Broken	F1.50	62.2	12.3		62.2	12.3	
					S1.50-F1.60	10.3	30.2		72.5	14.8	
					S1.60-F1.70	8.8	42.3		81.3	17.8	
					S1.70-F1.80	3.6	47.8		84.9	19.1	
					S1.80	15.1	74.9		100.0	27.5	
Sample 5											
DC1	266.00	1.17	- 12.7 + 0.0	Broken	F1.50	67.7	12.1		67.7	12.1	
					S1.50-F1.60	9.2	29.9		76.9	14.2	
					S1.60-F1.70	4.7	39.7		81.6	15.7	
					S1.70-F1.80	3.8	49.5		85.4	17.2	
					S1.80	14.6	73.7		100.0	25.4	
Sample 7											
DE2	368.49	0.79	- 12.7 + 0.0	Broken	F1.50	65.2	11.9		65.2	11.9	
					S1.50-F1.60	12.4	26.9		77.6	14.3	
					S1.60-F1.70	9.0	38.0		86.6	16.8	
					S1.70-F1.80	3.9	45.7		90.5	18.0	
					S1.80	9.5	69.0		100.0	22.9	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY6A

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
	262.95	0.45	- 12.7 + 0.0	Broken	F1.50	15.4	20.8		15.4	20.8	
					S1.50-F1.70	24.6	31.8		40.0	27.6	
					S1.70-F2.00	25.0	51.1		65.0	36.6	
					S2.00	35.0	78.0		100.0	51.1	
Sample 2											
DE2	263.92	0.97	- 12.7 + 0.0	Broken	F1.50	60.3	15.8		60.3	15.8	
					S1.50-F1.70	16.4	32.0		76.7	19.3	
					S1.70-F2.00	15.2	58.2		91.9	25.7	
					S2.00	8.1	72.6		100.0	29.5	
Sample 3											
DF	286.95	0.90	- 12.7 + 0.0	Broken	F1.50	16.8	19.4		16.8	19.4	
					S1.50-F1.70	43.0	30.4		59.8	27.3	
					S1.70-F2.00	23.4	48.5		83.2	33.3	
					S2.00	16.8	75.1		100.0	40.3	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY7

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
	207.25	1.51	- 12.7 + 0.0	Broken	F1.50	39.9	19.3		39.9	19.3	
					S1.50-F1.70	23.0	32.0		62.9	23.9	
					S1.70-F2.00	19.4	50.3		82.3	30.2	
					S2.00	17.7	79.9		100.0	39.0	
Sample 2											
DB	254.60	1.08	- 12.7 + 0.0	Broken	F1.50	39.1	10.3		39.1	10.3	
					S1.50-F1.70	15.0	33.1		54.1	16.6	
					S1.70-F2.00	12.1	54.3		66.2	23.5	
					S2.00	33.8	76.7		100.0	41.5	
Sample 3											
DC	281.76	1.03	- 12.7 + 0.0	Broken	F1.50	46.4	13.0		46.4	13.0	
					S1.50-F1.70	15.3	33.4		61.7	18.1	
					S1.70-F2.00	16.3	54.2		78.0	25.6	
					S2.00	22.0	77.5		100.0	37.0	
Sample 4											
DC1	314.32	0.49	- 12.7 + 0.0	Broken	F1.50	18.2	21.3		18.2	21.3	
					S1.50-F1.60	22.3	30.5		40.5	26.4	
					S1.60-F1.70	14.0	39.2		54.5	29.7	
					S1.70-F1.80	9.7	47.4		64.2	32.3	
					S1.80	35.8	71.8		100.0	46.5	
Sample 5											
DC1	315.56	1.24	- 12.7 + 0.0	Broken	F1.50	74.6	13.9		74.6	13.9	
					S1.50-F1.60	8.1	29.8		82.7	15.5	
					S1.60-F1.70	2.6	55.1		85.3	16.7	
					S1.70-F1.80	6.3	37.8		91.6	18.1	
					S1.80	8.4	69.5		100.0	22.4	
Sample 6											
DC1	316.43	0.87	- 12.7 + 0.0	Broken	F1.50	29.1	14.6		29.1	14.6	
					S1.50-F1.60	9.5	29.1		38.6	18.2	
					S1.60-F1.70	8.3	39.2		46.9	21.9	
					S1.70-F1.80	6.7	46.3		53.6	24.9	
					S1.80	46.4	81.1		100.0	51.0	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY8

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
	152.85	2.20	- 12.7 + 0.0	Broken	F1.50	42.6	16.6		42.6	16.6	
					S1.50-F1.70	18.9	35.3		61.5	22.3	
					S1.70-F2.00	17.7	48.9		79.2	28.3	
					S2.00	20.8	77.3		100.0	38.5	

SIGNATURE :

*** FRAME G04***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY9

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DB	187.19	0.86	- 12.7 + 0.0	Broken	F1.50	0.1	21.6		0.1	21.6	
					S1.50-F1.60	1.3	37.0		1.4	35.9	
					S1.60-F1.70	1.3	45.1		2.7	40.3	
					S1.70-F1.80	4.9	51.1		7.6	47.3	
					S1.80	92.4	74.5		100.0	72.4	
Sample 2											
DB	187.98	0.79	- 12.7 + 0.0	Broken	F1.50	14.1	22.0		14.1	22.0	
					S1.50-F1.60	19.4	32.7		33.5	28.2	
					S1.60-F1.70	12.1	40.2		45.6	31.4	
					S1.70-F1.80	7.6	50.2		53.2	34.1	
					S1.80	46.8	72.7		100.0	52.1	
Sample 3											
DB	189.07	1.09	- 12.7 + 0.0	Broken	F1.50	2.1	22.4		2.1	22.4	
					S1.50-F1.60	11.8	30.8		13.9	29.5	
					S1.60-F1.70	6.7	39.0		20.6	32.6	
					S1.70-F1.80	6.7	46.4		27.3	36.0	
					S1.80	72.7	77.6		100.0	66.2	
Sample 4											
DB	190.15	1.08	- 12.7 + 0.0	Broken	F1.50	2.9	28.7		2.9	28.7	
					S1.50-F1.60	9.7	33.7		12.6	32.5	
					S1.60-F1.70	15.2	39.9		27.8	36.6	
					S1.70-F1.80	10.0	50.3		37.8	40.2	
					S1.80	62.2	67.2		100.0	57.0	
Sample 6											
DDU	269.41	1.39	- 12.7 + 0.0	Broken	F1.50	81.7	15.7		81.7	15.7	
					S1.50-F1.60	9.2	31.3		90.9	17.3	
					S1.60-F1.70	3.2	36.1		94.1	17.9	
					S1.70-F1.80	1.4	42.7		95.5	18.3	
					S1.80	4.5	75.3		100.0	20.8	
Sample 8											
DDL	284.51	1.01	- 12.7 + 0.0	Broken	F1.50	57.0	19.1		57.0	19.1	
					S1.50-F1.60	15.4	26.3		72.4	20.6	
					S1.60-F1.70	17.2	33.4		89.6	23.1	
					S1.70-F1.80	3.8	41.2		93.4	23.8	
					S1.80	6.6	66.0		100.0	26.6	
Sample 10											
DE2	337.68	1.07	- 12.7 + 0.0	Broken	F1.50	73.4	12.1		73.4	12.1	
					S1.50-F1.60	9.0	26.3		82.4	13.7	
					S1.60-F1.70	6.6	35.1		89.0	15.2	
					S1.70-F1.80	3.4	40.9		92.4	16.2	
					S1.80	7.6	74.1		100.0	20.6	

SIGNATURE :

*** FRAME H04***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY10

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DB	289.84	0.92	- 12.7 + 0.0	Broken	F1.50	14.5	19.1		14.5	19.1	
					S1.50-F1.70	27.2	33.0		41.7	28.2	
					S1.70-F2.00	23.7	50.4		65.4	36.2	
					S2.00	34.6	77.0		100.0	50.3	
Sample 2											
DB	290.91	1.07	- 12.7 + 0.0	Broken	F1.50	2.8	23.3		2.8	23.3	
					S1.50-F1.70	7.4	37.7		10.2	33.7	
					S1.70-F2.00	31.2	56.5		41.4	50.9	
					S2.00	58.6	81.6		100.0	68.9	
Sample 3											
DB	292.71	1.80	- 12.7 + 0.0	Broken	F1.50	15.8	22.1		15.8	22.1	
					S1.50-F1.70	28.1	34.2		43.9	29.8	
					S1.70-F2.00	22.6	52.6		66.5	37.6	
					S2.00	33.5	74.2		100.0	49.8	
Sample 4											
DB	295.95	3.24	- 12.7 + 0.0	Broken	F1.50	0.8	26.1		0.8	26.1	
					S1.50-F1.70	7.2	39.0		8.0	37.7	
					S1.70-F2.00	21.1	58.0		29.1	52.4	
					S2.00	70.9	78.9		100.0	71.2	
Sample 5											
DB	297.16	1.21	- 12.7 + 0.0	Broken	F1.50	23.4	18.3		23.4	18.3	
					S1.50-F1.70	16.3	36.8		39.7	25.9	
					S1.70-F2.00	25.6	53.8		65.3	36.8	
					S2.00	34.7	79.2		100.0	51.5	
Sample 6											
DB	297.95	0.79	- 12.7 + 0.0	Broken	F1.50	3.9	17.7		3.9	17.7	
					S1.50-F1.70	4.2	41.7		8.1	30.1	
					S1.70-F2.00	17.5	57.1		25.6	48.6	
					S2.00	74.4	87.5		100.0	77.5	
Sample 7											
DC	311.96	0.89	- 12.7 + 0.0	Broken	F1.50	4.7	18.4		4.7	18.4	
					S1.50-F1.70	10.0	33.0		14.7	28.3	
					S1.70-F2.00	16.0	53.2		30.7	41.3	
					S2.00	69.3	68.3		100.0	60.0	
Sample 8											
DC	313.98	2.02	- 12.7 + 0.0	Broken	F1.50	20.2	17.1		20.2	17.1	
					S1.50-F1.70	17.7	32.0		37.9	24.1	
					S1.70-F2.00	17.7	55.3		55.6	34.0	
					S2.00	44.4	78.9		100.0	53.9	

SIGNATURE :

*** FRAME I04***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY10

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 9											
DDU	365.64	1.26	- 12.7 + 0.0	Broken	F1.50	63.6	14.9		63.6	14.9	
					S1.50-F1.55	8.8	30.1		72.4	16.7	
					S1.55-F1.70	2.9	38.4		75.3	17.6	
					S1.70-F1.80	1.7	48.3		77.0	18.3	
					S1.80	23.0	81.6		100.0	32.8	

SIGNATURE :

*** FRAME J04***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY11

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
	264.60	2.20	- 12.7 + 0.0	Broken	F1.50	38.8	13.1		38.8	13.1	
					S1.50-F1.60	12.7	29.8		51.5	17.2	
					S1.60-F1.70	9.4	38.7		60.9	20.5	
					S1.70-F1.80	6.4	47.7		67.3	23.1	
					S1.80	32.7	72.7		100.0	39.3	
Sample 2											
DDU	311.23	1.27	- 12.7 + 0.0	Broken	F1.50	73.1	15.4		73.1	15.4	
					S1.50-F1.60	7.6	34.6		80.7	17.2	
					S1.60-F1.70	1.7	37.3		82.4	17.6	
					S1.70-F1.80	5.1	51.3		87.5	19.6	
					S1.80	12.5	74.8		100.0	26.5	
Sample 3											
	325.97	1.33	- 12.7 + 0.0	Broken	F1.50	14.4	17.5		14.4	17.5	
					S1.50-F1.60	4.9	31.1		19.3	21.0	
					S1.60-F1.70	7.7	42.2		27.0	27.0	
					S1.70-F1.80	14.2	49.7		41.2	34.8	
					S1.80	58.8	78.5		100.0	60.5	
Sample 4											
DDL	327.40	1.43	- 12.7 + 0.0	Broken	F1.50	57.3	17.3		57.3	17.3	
					S1.50-F1.60	29.3	26.6		86.6	20.4	
					S1.60-F1.70	6.9	37.1		93.5	21.7	
					S1.70-F1.80	2.6	42.2		96.1	22.2	
					S1.80	3.9	66.1		100.0	23.9	
Sample 5											
DE2	381.24	0.89	- 12.7 + 0.0	Broken	F1.50	69.1	15.7		69.1	15.7	
					S1.50-F1.60	12.1	28.5		81.2	17.6	
					S1.60-F1.70	6.4	38.9		87.6	19.2	
					S1.70-F1.80	4.4	44.6		92.0	20.4	
					S1.80	8.0	65.5		100.0	24.0	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY12

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DB	295.41	0.70	- 12.7 + 0.0	Broken	F1.50	0.2	24.3		0.2	24.3	
					S1.50-F1.60	0.6	31.0		0.8	29.3	
					S1.60-F1.70	1.2	37.1		2.0	34.0	
					S1.70-F1.80	2.4	44.5		4.4	39.7	
					S1.80	95.6	74.3		100.0	72.8	
Sample 2											
DB	297.60	2.19	- 12.7 + 0.0	Broken	F1.50	6.3	19.9		6.3	19.9	
					S1.50-F1.60	13.7	28.9		20.0	26.1	
					S1.60-F1.70	12.3	37.3		32.3	30.3	
					S1.70-F1.80	12.4	47.1		44.7	35.0	
					S1.80	55.3	70.1		100.0	54.4	
Sample 3											
DB	299.13	1.53	- 12.7 + 0.0	Broken	F1.50	4.0	24.1		4.0	24.1	
					S1.50-F1.60	3.1	29.3		7.1	26.4	
					S1.60-F1.70	1.8	40.1		8.9	29.1	
					S1.70-F1.80	18.0	49.6		26.9	42.8	
					S1.80	73.1	74.4		100.0	65.9	
Sample 4											
DB	300.87	1.74	- 12.7 + 0.0	Broken	F1.50	0.5	25.0		0.5	25.0	
					S1.50-F1.60	1.1	36.7		1.6	33.0	
					S1.60-F1.70	4.0	40.1		5.6	38.1	
					S1.70-F1.80	8.8	50.0		14.4	45.4	
					S1.80	85.6	75.5		100.0	71.2	
Sample 5											
DB	301.62	0.75	- 12.7 + 0.0	Broken	F1.50	40.2	18.8		40.2	18.8	
					S1.50-F1.60	6.2	34.8		46.4	20.9	
					S1.60-F1.70	9.1	41.8		55.5	24.4	
					S1.70-F1.80	9.6	47.5		65.1	27.8	
					S1.80	34.9	74.1		100.0	43.9	
Sample 6											
	375.45	1.19	- 12.7 + 0.0	Broken	F1.50	35.4	15.2		35.4	15.2	
					S1.50-F1.60	9.4	31.2		44.8	18.6	
					S1.60-F1.70	5.0	38.6		49.8	20.6	
					S1.70-F1.80	5.2	51.2		55.0	23.5	
					S1.80	45.0	77.3		100.0	47.7	
Sample 7											
	376.78	1.33	- 12.7 + 0.0	Broken	F1.50	4.7	14.6		4.7	14.6	
					S1.50-F1.60	1.1	26.9		5.8	16.9	
					S1.60-F1.70	0.6	36.1		6.4	18.7	
					S1.70-F1.80	0.4	45.5		6.8	20.3	
					S1.80	93.2	85.5		100.0	81.1	

SIGNATURE :

*** FRAME L04***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY12

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 8											
DD	378.64	1.86	- 12.7 + 0.0	Broken	F1.50	55.5	12.0		55.5	12.0	
					S1.50-F1.60	8.7	25.4		64.2	13.8	
					S1.60-F1.70	8.9	35.6		73.1	16.5	
					S1.70-F1.80	7.5	42.4		80.6	18.9	
					S1.80	19.4	70.5		100.0	28.9	
Sample 9											
DD	379.38	0.74	- 12.7 + 0.0	Broken	F1.50	31.9	13.5		31.9	13.5	
					S1.50-F1.60	9.1	28.6		41.0	16.9	
					S1.60-F1.70	4.3	40.0		45.3	19.0	
					S1.70-F1.80	2.3	47.6		47.6	20.4	
					S1.80	52.4	80.5		100.0	51.9	
Sample 10											
DD	380.31	0.93	- 12.7 + 0.0	Broken	F1.50	4.6	17.5		4.6	17.5	
					S1.50-F1.60	2.4	31.8		7.0	22.4	
					S1.60-F1.70	2.1	40.4		9.1	26.6	
					S1.70-F1.80	3.7	48.1		12.8	32.8	
					S1.80	87.2	86.0		100.0	79.2	
Sample 11											
DD	381.52	1.21	- 12.7 + 0.0	Broken	F1.50	51.0	17.1		51.0	17.1	
					S1.50-F1.60	25.5	24.4		76.5	19.5	
					S1.60-F1.70	9.1	34.2		85.6	21.1	
					S1.70-F1.80	5.0	42.9		90.6	22.3	
					S1.80	9.4	65.8		100.0	26.4	
Sample 12											
DE2	443.74	0.72	- 12.7 + 0.0	Broken	F1.50	51.0	15.6		51.0	15.6	
					S1.50-F1.60	15.8	27.1		66.8	18.3	
					S1.60-F1.70	10.2	36.8		77.0	20.8	
					S1.70-F1.80	5.7	43.5		82.7	22.3	
					S1.80	17.3	68.0		100.0	30.2	

SIGNATURE :

*** FRAME A05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY14

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Composite of Samples 7-9											
DDU	267.29	1.19	- 38.1 + 0.5 (85.7% of Sample)	Broken	F1.35	24.2	8.0		24.2	6.0	
					S1.35-F1.40	20.8	11.9		45.0	9.8	
					S1.40-F1.45	21.6	18.5		66.6	12.6	
					S1.45-F1.50	3.3	23.6		69.9	13.1	
					S1.50-F1.55	4.5	30.3		74.4	14.2	
					S1.55-F1.60	2.0	32.1		76.4	14.6	
					S1.60-F1.70	2.8	39.3		79.2	15.5	
					S1.70-F1.80	1.7	46.9		80.9	16.2	
					S1.80-F1.90	1.2	57.0		82.1	16.8	
					S1.90-F2.00	0.6	63.4		82.7	17.1	
					S2.00	17.3	81.0		100.0	28.2	
Composite of Samples 10-13											
DDL	281.30	2.59	- 38.1 + 0.5 (87.6% of Sample)	Broken	F1.35	7.0	9.3		7.0	9.3	
					S1.35-F1.40	6.8	13.0		13.8	11.1	
					S1.40-F1.45	16.0	16.7		29.8	14.1	
					S1.45-F1.50	11.9	22.5		41.7	16.5	
					S1.50-F1.55	10.9	26.7		52.6	18.6	
					S1.55-F1.60	7.4	31.0		60.0	20.1	
					S1.60-F1.70	8.6	37.9		68.6	22.4	
					S1.70-F1.80	6.2	47.1		74.8	24.4	
					S1.80-F1.90	3.8	55.6		78.6	25.9	
					S1.90-F2.00	4.2	61.0		82.8	27.7	
					S2.00	17.2	79.9		100.0	36.7	
Sample 14											
DE2	330.91	1.15	- 38.1 + 0.5 (84.1% of Sample)	Broken	F1.35	12.9	9.7		12.9	9.7	
					S1.35-F1.40	4.9	13.5		17.8	10.7	
					S1.40-F1.45	11.4	15.7		29.2	12.7	
					S1.45-F1.50	6.1	20.2		35.3	14.0	
					S1.50-F1.55	2.6	23.4		37.9	14.6	
					S1.55-F1.60	3.2	27.5		41.1	15.6	
					S1.60-F1.70	15.7	36.7		56.8	21.5	
					S1.70-F1.80	19.5	43.8		76.3	27.2	
					S1.80-F1.90	8.5	51.5		84.8	29.6	
					S1.90-F2.00	3.0	57.1		87.8	30.5	
					S2.00	12.2	74.4		100.0	35.9	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY14

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Composite of Samples 7-9											
DDU	267.29	1.19	- 0.5 + 0.1	Broken	F1.50	48.2	12.8		48.2	12.8	
			(11.0% of Sample)		S1.50	51.8	58.0		100.0	36.2	
Composite of Samples 10-13											
DDL	281.30	2.59	- 0.5 + 0.1	Broken	F1.50	36.0	16.7		36.0	16.7	
			(10.4% of Sample)		S1.50	64.0	49.8		100.0	37.9	
Sample 14											
DE2	330.91	1.15	- 0.5 + 0.1	Broken	F1.50	27.2	11.6		27.2	11.6	
			(12.9% of Sample)		S1.50	72.8	46.8		100.0	37.2	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY17

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDU	468.27	1.52	- 12.7 + 0.0	Broken	F1.50	66.9	14.7		66.9	14.7	
					S1.50-F1.60	11.2	30.0		78.1	16.9	
					S1.60-F1.70	3.3	39.1		81.4	17.8	
					S1.70-F1.80	1.1	47.9		82.5	18.2	
					S1.80	17.5	78.1		100.0	28.7	
Sample 2											
	481.54	1.19	- 12.7 + 0.0	Broken	F1.50	1.2	23.9		1.2	23.9	
					S1.50-F1.60	0.6	27.5		1.8	25.1	
					S1.60-F1.70	0.8	44.8		2.6	31.2	
					S1.70-F1.80	10.0	49.5		12.6	45.7	
					S1.80	87.4	72.1		100.0	68.8	
Sample 3											
DDL	483.49	1.95	- 12.7 + 0.0	Broken	F1.50	68.7	15.0		68.7	15.0	
					S1.50-F1.60	12.0	27.8		80.7	16.9	
					S1.60-F1.70	4.9	36.8		85.6	18.0	
					S1.70-F1.80	3.5	44.9		89.1	19.1	
					S1.80	10.9	65.9		100.0	24.2	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY18

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DD	219.14	0.85	- 12.7 + 0.0	Broken	F1.50	89.4	11.1		89.4	11.1	
					S1.50-F1.60	7.8	27.9		97.2	12.4	
					S1.60-F1.70	1.3	34.3		98.5	12.7	
					S1.70-F1.80	0.0	0.0		98.5	12.7	
					S1.80	1.5	53.7		100.0	13.4	
Sample 2											
DD	222.80	1.51	- 12.7 + 0.0	Broken	F1.50	63.8	15.4		63.8	15.4	
					S1.50-F1.60	0.0	0.0		63.8	15.4	
					S1.60-F1.70	7.6	31.1		71.4	17.1	
					S1.70-F1.80	22.4	42.7		93.8	23.2	
					S1.80	6.2	58.9		100.0	25.4	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis
Unless Otherwise Indicated By
Letter Symbol Between Brackets)

BOREHOLE : GY20

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE			FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1												
DDL	436.41	2.06	- 25.4 + 0.0	Broken		F1.70	83.4	14.3	4.4	83.4	14.3	4.4
					S1.70		16.6	65.7		100.0	22.8	
Sample 3												
DDL	438.95	0.71	- 25.4 + 0.0	Broken		F1.70	78.4	22.4	4.5	78.4	22.4	4.5
					S1.70		21.6	64.4		100.0	31.5	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY21

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 2											
DDL	285.90	1.18	- 25.4 + 0.0	Broken	F1.70	46.9	25.6	4.2	46.9	25.6	4.2
					S1.70	53.1	72.0		100.0	50.2	
Sample 3											
DDL	289.34	0.77	- 25.4 + 0.0	Broken	F1.70	78.2	20.1	5.3	78.2	20.1	5.3
					S1.70	21.8	66.6		100.0	30.2	

SIGNATURE :

*** FRAME G05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis
Unless Otherwise Indicated By
Letter Symbol Between Brackets)

BOREHOLE : GY22

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	215.47	0.79	- 25.4 + 0.0	Broken	F1.70	79.8	21.1	3.9	79.8	21.1	3.9
					S1.70	20.2	68.6		100.0	30.7	

SIGNATURE :

*** FRAME H05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY23

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE			FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 2												
DDL	338.76	1.20	- 25.4 + 0.0	Broken		F1.70	75.1	15.9	4.7	75.1	15.9	4.7
					S1.70		24.9	66.0		100.0	28.4	
Sample 3												
	341.05	0.20	- 25.4 + 0.0	Broken		F1.70	11.3	40.8	3.9	11.3	40.8	3.9
					S1.70		88.7	80.1		100.0	75.7	
Sample 4												
DDL	342.24	1.19	- 25.4 + 0.0	Broken		F1.70	76.0	20.1	3.5	76.0	20.1	3.5
					S1.70		24.0	66.3		100.0	31.2	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY25

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	475.17	1.33	- 25.4 + 0.0	Broken	F1.70	67.7	23.3	2.7	67.7	23.3	2.7
					S1.70	32.3	52.9	2.8	100.0	32.9	2.7
Sample 3											
	477.01	1.68	- 25.4 + 0.0	Broken	F1.70	76.8	15.8	3.4	76.8	15.8	3.4
					S1.70	23.2	53.9	2.9	100.0	24.6	3.3
Sample 4											
DDL	478.12	1.11	- 25.4 + 0.0	Broken	F1.70	53.0	21.4	2.6	53.0	21.4	2.6
					S1.70	47.0	62.2	2.2	100.0	40.6	2.4
Sample 5											
DDL	479.34	1.22	- 25.4 + 0.0	Broken	F1.70	66.9	20.4	3.3	66.9	20.4	3.3
					S1.70	33.1	63.5	2.8	100.0	34.7	3.1
Sample 4+5											
DDL	479.34	2.33	- 25.4 + 0.0	Broken	F1.70	63.2	20.6		63.2	20.6	
					S1.70-F1.80	6.3	38.0		69.5	22.2	
					S1.80	30.5	68.4		100.0	36.3	

SIGNATURE :

*** FRAME J05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY27

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	349.19	2.03	- 25.4 + 0.0	Broken	F1.70	85.3	19.4		85.3	19.4	
					S1.70-F1.80	5.0	37.4		90.3	20.4	
					S1.80	9.7	67.7		100.0	25.0	
Sample 2											
DDL	351.16	1.97	- 25.4 + 0.0	Broken	F1.70	77.4	18.8		77.4	18.8	
					S1.70-F1.80	4.3	39.5		81.7	19.9	
					S1.80	18.3	73.0		100.0	29.6	

SIGNATURE :

*** FRAME K05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY29

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	281.58	1.55	- 25.4 + 0.0	Broken	F1.70	74.1	18.2	3.7	74.1	18.2	3.7
					S1.70	25.9	70.7	3.5	100.0	31.8	3.6
Sample 3											
DDL	282.12	0.24	- 25.4 + 0.0	Broken	F1.70	68.7	19.5	3.5	68.7	19.5	3.5
					S1.70	31.3	70.4	3.6	100.0	35.4	3.5
Sample 4											
	285.28	0.65	- 25.4 + 0.0	Broken	F1.70	41.7	20.5	3.8	41.7	20.5	3.8
					S1.70	58.3	66.5	5.1	100.0	47.3	4.6
Sample 6											
DDL	287.24	1.44	- 25.4 + 0.0	Broken	F1.70	65.3	26.7	3.5	65.3	26.7	3.5
					S1.70	34.7	65.1	4.1	100.0	40.0	3.7

SIGNATURE :

*** FRAME L05***

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY30

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE			FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1												
DD	266.79	2.73	- 25.4 + 0.0	Broken		F1.70	66.8	17.4	5.6	66.8	17.4	5.6
					S1.70		33.2	62.3	4.1	100.0	32.3	5.1
Sample 2												
DD	267.45	0.66	- 25.4 + 0.0	Broken		F1.70	45.9	20.2	6.0	45.9	20.2	6.0
					S1.70		54.1	81.1	3.5	100.0	53.1	4.6
Sample 3												
DD	268.10	0.65	- 25.4 + 0.0	Broken		F1.70	16.1	26.7	7.5	16.1	26.7	7.5
					S1.70		83.9	74.6	3.8	100.0	66.9	4.4
Sample 4												
DD	269.32	1.22	- 25.4 + 0.0	Broken		F1.70	91.5	20.1	5.9	91.5	20.1	5.9
					S1.70		8.5	60.0	3.5	100.0	23.5	5.7

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY32

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE			FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1												
DE	200.93	1.34	- 25.4 + 0.0	Broken		F1.70	49.6	21.3	6.3	49.6	21.3	6.3
					S1.70		50.4	56.7	5.6	100.0	39.1	5.9
Sample 2												
DE	201.72	0.79	- 25.4 + 0.0	Broken		F1.70	24.2	31.2	4.9	24.2	31.2	4.9
					S1.70		75.8	58.6	4.3	100.0	52.0	4.4

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis
Unless Otherwise Indicated By
Letter Symbol Between Brackets)

BOREHOLE : GY103

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	224.50	0.53	- 25.4 + 0.0	Broken	F1.60	86.6	21.0		86.6	21.0	
					S1.60-F1.70	4.0	35.2		90.6	21.6	
					S1.70-F1.80	2.0	42.9		92.6	22.1	
					S1.80	7.4	75.0		100.0	26.0	
Sample 2											
DDL	225.86	1.36	- 25.4 + 0.0	Broken	F1.60	62.5	18.9		62.5	18.9	
					S1.60-F1.70	5.6	39.3		68.1	20.6	
					S1.70-F1.80	5.0	47.0		73.1	22.4	
					S1.80	26.9	73.7		100.0	36.2	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis Unless Otherwise Indicated By Letter Symbol Between Brackets)

BOREHOLE : GY104

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Sample 1											
DDL	158.88	0.55	- 25.4 + 0.0	Broken	F1.60	78.4	21.4		78.4	21.4	
					S1.60-F1.70	6.1	36.5		84.5	22.5	
					S1.70-F1.80	1.4	43.8		85.9	22.8	
					S1.80	14.1	70.5		100.0	29.6	
Sample 2											
DDL	160.06	1.18	- 25.4 + 0.0	Broken	F1.60	63.5	18.5		63.5	18.5	
					S1.60-F1.70	1.9	35.3		65.4	19.0	
					S1.70-F1.80	2.0	47.2		67.4	19.8	
					S1.80	32.6	76.1		100.0	38.2	

SIGNATURE :

WASHABILITY ANALYSIS

GRAY

(All Results On Air Dried Basis
Unless Otherwise Indicated By
Letter Symbol Between Brackets)

BOREHOLE : GY105

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	FRACTIONAL MOIST%	CUMULATIVE MASS%	CUMULATIVE ASH%	CUMULATIVE MOIST%
Analysed Composite of Samples A1-11											
DDL	337.50	5.25	- 5.6 + 0.0	Broken	F1.40	23.6	8.7		23.6	8.7	
					S1.40-F1.60	27.7	19.8		51.3	14.7	
					S1.60-F1.70	4.7	36.2		56.0	16.5	
					S1.70-F1.80	4.2	47.1		60.2	18.6	
					S1.80-F2.00	3.4	58.4		63.6	20.8	
					S2.00	36.4	86.7		100.0	44.8	

SIGNATURE :

WASHABILITY ANALYSIS

DATE: 28/05/84

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GYDRA1

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	CUMULATIVE MASS%	CUMULATIVE ASH%
SAMPLE 1									
	2.52	2.51	- 45.0 + 5.6 (63.6% OF SAMPLE)	WET TUMBLED	F1.40	32.4	13.0	32.4	13.0
					S1.40-F1.50	35.1	20.2	67.5	16.7
					S1.50-F1.60	13.2	29.4	80.7	18.8
					S1.60-F1.70	5.4	40.6	86.1	20.2
					S1.70-F1.80	4.1	48.4	90.2	21.5
					S1.80-F1.90	1.9	56.0	92.1	22.2
					S1.90-F2.00	1.1	61.0	93.2	22.6
					S2.00	6.8	77.5	100.0	26.4
			- 5.6 + 0.5WW (25.6% OF SAMPLE)		F1.40	21.6	8.4	21.6	8.4
					S1.40-F1.50	26.7	17.4	48.3	13.4
					S1.50-F1.60	12.6	27.1	60.9	16.2
					S1.60-F1.70	5.6	37.4	66.5	18.0
					S1.70-F1.80	3.8	46.5	70.3	19.5
					S1.80-F1.90	2.9	53.1	73.2	20.9
					S1.90-F2.00	3.0	59.0	76.2	22.4
					S2.00	23.8	82.8	100.0	36.8
			- 0.5WW + 0.0 (10.8% OF SAMPLE)		FROTH CONC.	36.2	25.3	36.2	25.3
					TAILINGS	63.8	43.7	100.0	37.0
			- 45.0 + 0.5WW (89.2% OF SAMPLE)		F1.40	29.3	12.0	29.3	12.0
					S1.40-F1.50	32.7	19.5	62.0	16.0
					S1.50-F1.60	13.0	28.8	75.0	18.2
					S1.60-F1.70	5.5	39.7	80.5	19.7
					S1.70-F1.80	4.0	47.9	84.5	21.0
					S1.80-F1.90	2.2	54.9	86.7	21.8
					S1.90-F2.00	1.7	59.9	88.4	22.6
					S2.00	11.6	80.6	100.0	29.3

SIGNATURE :

*** FRAME F06***

WASHABILITY ANALYSIS

DATE: 28/05/84

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GYDRA2

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE SIZE MM	SAMPLE STATE		FRACTIONAL MASS%	FRACTIONAL ASH%	CUMULATIVE MASS%	CUMULATIVE ASH%
SAMPLE 2									
	2.52	2.51	- 25.0 + 0.0 (100.0% OF SAMPLE)	BROKEN	F1.60	70.1	18.1	70.1	18.1
					S1.60-F1.70	5.6	37.1	75.7	19.5
					S1.70-F1.80	3.2	46.3	78.9	20.6
					S1.80	21.1	75.6	100.0	32.2

SIGNATURE :

*** FRAME G06***

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHED COAL / COMPOSITE ANALYSIS

GRAY

APPENDIX E3 : WASH COAL /COMPOSITE ANALYSIS

*** FRAME H06***

THE SHELL COMPANY OF AUSTRALIA LTD.

WASHED COAL / COMPOSITE ANALYSIS

LEGEND

TOTAL MOISTURE BASIS

	Air Dried
A	As Received
T	Total
B	Bed
Q	Equilibrium
E	Estimated Value

INHERENT MOISTURE BASIS

	Air Dried
E	Estimated Value

TOTAL SULPHUR BASIS

	Air Dried
A	As Received
R	Dry Basis

ASH/VOLATILE MATTER/FIXED CARBON BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free
E	Estimated Value

SPECIFIC ENERGY BASIS

	Air Dried
A	As Received
R	Dry Basis
D	Dry, Ash Free
C	Dry, Mineral Matter Free
M	Moist, Ash Free

SAMPLE STATE

COL 1-4:	WTFR	Wet Tumbled. Fractional
	DTFR	Dry Tumbled. Fractional
	WTCU	Wet Tumbled. Cumulative
	DTCU	Dry Tumbled. Cumulative
	FR	Broken - Not Tumbled. Fractional
	CU	Broken - Not Tumbled. Cumulative
	BROK	Broken - Not Tumbled.
COL 5:	blank	
COL 6:	S	Sink Fraction
	F	Float Fraction
COL 7-10:	N.NN	Separation Relative Density

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY1

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1 DDL	206.98	1.68	CU F1.55	82.5	3.1	17.4	23.5	56.0	0.35	0.5	25.94	
Sample 4 DE2	256.48	2.20	CU F1.60	51.9	3.1	17.4	24.9	54.6	0.46		26.11	
Sample 7 DF	283.52	0.88	CU F1.60	50.0	4.1	16.5	22.3	57.1	0.33		26.13	

SIGNATURE :

*** FRAME J06***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY2

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 2												
DB	260.44	0.64	CU F1.60	62.4	3.2	23.5	26.5	46.8	0.42		23.99	
Sample 4+5												
DB	264.09	2.12	CU F1.60	43.4	3.2	16.0	29.5	51.3	0.45		26.32	
Sample 7+8												
DC	291.84	2.46	CU F1.60	38.0	3.0	13.5	31.6	51.9	0.45		27.51	
Sample 9												
DDL	357.84	0.78	CU F1.55	48.2	2.4	17.2	27.8	52.6	0.38	1.0	26.45	
Sample 10												
DDL	359.85	2.01	CU F1.55	74.3	2.5	15.4	27.2	54.9	0.39	1.0	26.93	
Sample 16-18												
	348.55	2.33	CU F1.80	56.7	2.7	15.6	28.4	53.3	0.35		27.18	
Sample 13												
DE2	407.32	0.76	CU F1.70	56.3	2.3	22.2	26.9	48.6	0.45		24.39	
Sample 14												
DF	433.18	0.50	CU F1.70	46.8	1.8	21.9	22.8	53.5	0.34		24.80	

SIGNATURE :

*** FRAME K06***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY3

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1												
DDU	361.96	0.99	CU F1.70	45.0	3.7	20.6	28.2	47.5	0.33	0.5	25.54	
Sample 2												
DDU	363.82	1.86	CU F1.70	91.9	3.9	13.4	30.2	52.5	0.33	0.5	28.06	
Sample 3												
DDL	377.30	0.62	CU F1.55	72.3	3.5	15.8	28.6	52.1	0.30	0.5	27.12	
Sample 4												
DDL	379.50	2.20	CU F1.55	77.6	3.5	14.1	26.7	55.7	0.50	0.5	27.68	
Sample 5+6												
DF	441.03	1.26	CU F1.70	56.1	3.0	22.3	22.4	52.3	0.49		25.02	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY4

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1-5												
DB	219.34	4.29	CU F1.70	50.6	4.9	26.1	25.2	43.8	0.60		22.53	
Sample 7												
DDU	303.92	1.77	CU F1.55	83.4	4.0	15.8	27.5	52.7	0.31	0.5	27.10	
Sample 9												
DDL	318.52	1.44	CU F1.60	71.4	5.3	23.1	23.0	48.6	0.32		24.06	

SIGNATURE :

*** FRAME A07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY5

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 3-5												
DC1	266.00	2.24	CU F1.65	64.8	4.4	15.3	30.5	49.8	0.51		27.42	
			CU F1.80	70.5	4.1	18.5	30.1	47.3	0.48		26.41	
Sample 7												
DE2	368.49	0.79	CU F1.65	82.4	3.3	15.7	30.8	50.2	0.48		27.29	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY6A

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1+2 DE2	263.92	1.42	CU F1.70	63.6	4.0	21.3	24.1	50.6	0.42		24.65	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY7

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1+2												
DB	254.60	2.59	CU F1.70	59.2	3.5	21.3	28.5	46.7	0.35		24.85	
Sample 3												
DC	281.76	1.03	CU F1.70	61.7	4.3	18.1	30.6	47.0	0.46		25.92	
Sample 5+6												
DC1	316.43	2.11	CU F1.50	53.5	4.1	14.1	30.9	50.9	0.40		27.68	
Sample 4-6												
DC1	316.43	2.60	CU F1.80	74.0	3.8	22.6	28.6	45.0	0.36		24.44	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY8

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1	152.85	2.20	CU F1.70	61.5	2.9	22.5	28.4	46.2	0.47		24.54	

SIGNATURE :

*** FRAME E07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY9

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 6												
DDU	269.41	1.39	CU F1.60	90.9	3.4	17.3	28.1	51.2	0.34		26.82	
Sample 8												
DDL	284.51	1.01	CU F1.60	72.4	3.9	20.5	23.5	52.1	0.37		24.83	
Sample 10												
DE2	337.68	1.07	CU F1.70	89.0	3.2	15.2	29.1	52.5	0.47		27.68	

SIGNATURE :

*** FRAME F07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY10

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 9												
DDU	365.64	1.26	CU F1.50	63.6	4.2	14.7	27.9	53.2	0.34		27.23	
			CU F1.80	77.0	4.3	18.2	26.6	50.9	0.34		26.07	

SIGNATURE :

*** FRAME - G07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY11

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1	264.60	2.20	CU F1.80	67.3	5.1	23.2	26.6	45.1	0.37		23.74	
Sample 2 DDU	311.23	1.27	CU F1.60	80.7	4.2	17.4	28.5	49.9	0.38		26.60	
Sample 3+4 DDL	327.40	2.76	CU F1.80	65.9	3.8	26.2	23.5	46.5	0.33		23.73	

SIGNATURE :

*** FRAME H07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY12

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 8												
DD	378.64	1.86	CU F1.80	80.6	3.8	18.4	26.9	50.9	0.34		25.05	
Sample 11												
DD	381.52	1.21	CU F1.80	90.6	3.4	22.3	24.2	50.1	0.33		23.91	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY14

SAMPLE SIZE : - 0.5 + 0.1 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 7-9												
DDU	267.29	1.19	FR F1.50	48.2		12.8			0.39			
			FR S1.50	51.8		58.0			0.16			
Sample 10-13												
DDL	281.30	2.59	FR F1.50	36.0		16.7			0.34			
			FR S1.50	64.0		49.8			0.21			
Sample 14												
DE2	330.91	1.15	FR F1.50	27.2		11.6			0.37			
			FR S1.50	72.8		46.8			0.19			

SIGNATURE :

*** FRAME J07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY17

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1 DDU	468.27	1.52	CU F1.80	82.5	4.1	18.3	27.9	49.7	0.35		25.92	
Sample 3 DDL	483.49	1.95	CU F1.80	89.1	3.8	19.2	25.5	51.5	0.29		25.73	

SIGNATURE :

*** FRAME K07***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY18

SAMPLE SIZE : - 12.7 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 2 DD	222.80	1.51	CU F1.80		3.7	22.8	25.2	48.3	0.30		24.40	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY20

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1 DDL	436.41	2.06	FR F1.70	83.4	4.4	14.3	28.0	53.3	0.31		28.12	
			FR S1.70	16.6		65.7					6.98	
Sample 3 DDL	438.95	0.71	FR F1.70	78.4	4.5	22.4	28.1	45.0	0.41		24.37	
			FR S1.70	21.6		64.4					7.64	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY21

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 2 DDL	285.90	1.18	FR F1.70	46.9	4.2	25.6	24.3	45.9			23.23	
			FR S1.70	53.1		72.0					5.23	
Sample 3 DDL	289.34	0.77	FR F1.70	78.2	5.3	20.1	28.0	46.6			25.47	
			FR S1.70	21.8		66.6					5.35	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY22

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample	1											
DDL	215.47	0.79	FR S1.70	79.8	3.9	21.1	30.4	44.6	0.49		25.70	
			FR S1.70	20.2		68.6					5.51	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY23

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 2												
DDL	338.76	1.20	FR F1.70	75.1	4.7	15.9	29.3	50.1			26.82	
			FR S1.70	24.9		66.0					6.96	
Sample 3												
	341.05	0.20	FR F1.70	11.3	3.9	40.8	17.6	37.7	0.29		17.41	
			FR S1.70	88.7		80.1					2.70	
Sample 4												
DDL	342.24	1.19	FR F1.70	76.0	3.5	20.1	29.8	46.6	0.45		26.05	
			FR S1.70	24.0		66.3					6.04	

SIGNATURE :

*** FRAME D08***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY25

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1 DDL	475.17	1.33	FR F1.70	67.7	2.7	23.3	25.4	48.6	0.29		24.84	
			FR S1.70	32.3	2.8	52.9					13.02	
Sample 3	477.01	1.68	FR F1.70	76.8	3.4	15.8	28.0	52.8	0.26		26.93	
			FR S1.70	23.2	2.9	53.9					10.62	
Sample 4 DDL	478.12	1.11	FR F1.70	53.0	2.6	21.4	30.3	45.7	0.36		28.86	
			FR S1.70	47.0	2.2	62.2					7.61	
Sample 5 DDL	479.34	1.22	FR F1.70	66.9	3.3	20.4	29.9	46.4	0.41		25.80	
			FR S1.70	33.1	2.8	63.5					8.35	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY27

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1												
DDL	349.19	2.03	CU F1.70	85.3	4.0	19.4	24.4	52.2	0.19		25.73	
			CU S1.70	14.7	2.7	56.3					11.23	
Sample 2												
DDL	351.16	1.97	CU F1.70	77.4	6.2	18.8	28.0	47.0	0.28		25.26	
			CU S1.70	22.6	4.0	65.5					7.36	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY29

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1												
DDL	281.58	1.55	FR F1.70	74.1	3.7	18.2	27.8	50.3	0.36		26.36	
			FR S1.70	25.9	3.5	70.7					6.34	
Sample 3												
DDL	282.12	0.24	FR F1.70	68.7	3.5	19.5	31.8	45.2	0.46		26.38	
			FR S1.70	31.3	3.6	70.4					6.84	
Sample 4	285.28	0.65	FR F1.70	41.7	3.8	20.5	23.7	52.0	0.28		25.61	
			FR S1.70	58.3	5.1	66.5					7.33	
Sample 6												
DDL	287.24	1.44	FR F1.70	65.3	3.5	26.7	28.1	41.7	0.37		23.38	
			FR S1.70	34.7	4.1	65.1					8.20	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY30

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1												
DD	266.79	2.73	FR F1.70	66.8	5.6	17.4	27.2	49.8	0.26		25.37	
			FR S1.70	33.2	4.1	62.3					8.51	
Sample 2												
DD	267.45	0.66	FR F1.70	45.9	6.0	20.2	28.3	45.5	0.28		25.07	
			FR S1.70	54.1	3.5	81.1					2.21	
Sample 3												
DD	268.10	0.65	FR F1.70	16.1	7.5	26.7	28.0	37.8	0.48		21.68	
			FR S1.70	83.9	3.8	74.6					4.59	
Sample 4												
DD	269.32	1.22	FR F1.70	91.5	5.9	20.1	22.5	51.5	0.23		24.22	
			FR S1.70	8.5	3.5	60.0					9.42	

SIGNATURE :

*** FRAME H08***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY32

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1												
DE	200.93	1.34	FR F1.70	49.6	6.3	21.3	20.5	51.9	0.20		23.58	
			FR S1.70	50.4	5.6	56.7					9.35	
Sample 2												
DE	201.72	0.79	FR F1.70	24.2	4.9	31.2	19.9	44.0	0.23		20.26	
			FR S1.70	75.8	4.3	58.6					9.28	

SIGNATURE :

*** FRAME I08***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY103

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample	1+2											
DDL	225.86	1.89	CU F1.70	73.9	3.1	20.6	29.7	46.6	0.40		25.74	

SIGNATURE :

*** FRAME J08***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY104

SAMPLE SIZE : - 25.4 + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample 1+2 DDL	160.06	1.73	CU F1.70	71.7	3.5	20.3	29.5	46.7	0.39		25.81	

SIGNATURE :

*** FRAME K08***

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY105

SAMPLE SIZE : - 5.6 + 0.00 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS: INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Analysed Composite of samples A1-11												
DDL	337.50	5.25	CU F1.80	60.2	4.4	18.6	27.0	50.0	0.37		25.38	1.48

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 5.6 + 0.5WW MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	PROXIMATE ANALYSIS ASH %	PROXIMATE ANALYSIS VOLATILE MATTER %	PROXIMATE ANALYSIS FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (HJ/KG)	SAMPLE RELATIVE DENSITY
Sample	1 2.52	2.51	WTFR F1.40	21.6		8.4				1.0		

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 0.5WW + 0.0 MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample	1		Concent.	36.2		25.3			0.41		23.52	

SIGNATURE :

WASHED COAL / COMPOSITE ANALYSIS

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 45.0 + 0.5WW MM

SEAM CODE	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	YIELD MASS %	PROXIMATE ANALYSIS INHERENT MOISTURE %	ASH %	VOLATILE MATTER %	FIXED CARBON %	TOTAL SULPHUR %	CRUCIBLE SWELLING NUMBER	SPECIFIC ENERGY (MJ/KG)	SAMPLE RELATIVE DENSITY
Sample	1		WTCU F1.70	80.5	2.7	20.0	27.8	49.5	0.28		25.33	1.50

SIGNATURE :

THE SHELL COMPANY OF AUSTRALIA LTD.

PRETREATMENT AND SIZING REPORT

GRAY

APPENDIX E4 PRETREATMENT AND SIZING REPORT

PRETREATMENT AND SIZING REPORT

GRAY

BOREHOLE : GY14

SAMPLE DESCRIPTION	SIZE RANGE MM	SAMPLE SIZING (AS REDUCED) MASS%	SAMPLE SIZING (AS REDUCED) ASH%	FEED SIZING (DRY TUMBLED) MASS%	FEED SIZING (DRY TUMBLED) ASH%	PRODUCT SIZING (WET TUMBLED) MASS%	PRODUCT SIZING (WET TUMBLED) ASH%
SAMPLE 10-13 SEAM DDL INITIAL TOP SIZE - 38.1 MM RAW HGI 58	- 38.1 + 25.4	46.7		6.0		5.2	
	- 25.4 + 12.7	31.9		21.9		21.9	
	- 12.7 + 6.35	9.7		24.9		23.9	38.1
	- 6.35 + 3.18	4.9		16.0		16.6	36.5
	- 3.18 + 00.5WW					20.2	38.3
	-00.5WW + 00.1					10.4	37.9
	- 00.1 + 00.0					2.0	43.5
	- 3.18 + 00.0	6.8		31.2			
	- 38.1 + 12.7					27.1	40.4
	- 38.1 + 00.0					100.0	37.0
SAMPLE 14 SEAM DE2 INITIAL TOP SIZE - 38.1 MM RAW HGI 60	- 38.1 + 25.4	41.8		6.0		2.3	
	- 25.4 + 12.7	36.0		22.1			
	- 12.7 + 6.35	10.7		18.1		20.0	38.5
	- 6.35 + 3.18	4.9		16.0		16.9	35.0
	- 3.18 + 00.5WW	6.5		37.8		23.7	31.2
	-00.5WW + 00.1					12.9	36.9
	- 00.1 + 00.0					3.0	41.5
	- 38.1 + 12.7					21.2	39.7
	- 38.1 + 00.0					100.0	36.5

SIGNATURE :

PRETREATMENT AND SIZING REPORT

GRAY

BOREHOLE : GY14

SAMPLE DESCRIPTION	SIZE RANGE MM	SAMPLE SIZING (AS REDUCED) MASS%	SAMPLE SIZING (AS REDUCED) ASH%	FEED SIZING (DRY TUMBLED) MASS%	FEED SIZING (DRY TUMBLED) ASH%	PRODUCT SIZING (WET TUMBLED) MASS%	PRODUCT SIZING (WET TUMBLED) ASH%
SAMPLE 7-9 SEAM DDU INITIAL TOP SIZE - 38.1 MM RAW HGI 56	- 38.1 + 25.4	33.6		6.1		4.9	
	- 25.4 + 12.7	35.3		22.3		19.3	
	- 12.7 + 6.35	13.7		23.3		21.2	24.5
	- 6.35 + 3.18	7.2		16.2		20.3	37.4
	- 3.18 + 00.5WW					20.0	30.8
	-00.5WW + 00.1					11.0	36.2
	- 00.1 + 00.0					3.3	50.0
	- 3.18 + 00.0	10.2		32.1			
	- 38.1 + 12.7					24.2	19.3
	- 38.1 + 00.0					100.0	29.3

SIGNATURE :

*** FRAME F09***

PRETREATMENT AND SIZING REPORT

GRAY

BOREHOLE : GYDRA1

SAMPLE DESCRIPTION	SIZE RANGE MM	SAMPLE SIZING (AS REDUCED) MASS%	SAMPLE SIZING (AS REDUCED) ASH%	FEED SIZING (DRY TUMBLED) MASS%	FEED SIZING (DRY TUMBLED) ASH%	PRODUCT SIZING (WET TUMBLED) MASS%	PRODUCT SIZING (WET TUMBLED) ASH%
SAMPLE 1	- 45.0 + 22.4	40.1		28.0		27.8	22.5
SEAM							
INITIAL TOP SIZE - 45.0 MM	- 22.4 + 11.2	27.9		19.0		18.6	28.6
RAW HGI	- 11.2 + 5.6	15.5		18.0		17.2	32.7
	- 5.6 + 2.8	7.6		12.0		10.5	38.2
	- 2.8 + 1.4			8.6		11.0	37.3
	- 1.4 + 0.5WW			3.7		4.1	34.5
	- 0.5WW + 0.0			10.7		10.8	41.9
	- 2.8 + 0.0	8.9					

SIGNATURE :

*** FRAME G09***

PRETREATMENT AND SIZING REPORT

GRAY

BOREHOLE : GYDRA2

SAMPLE DESCRIPTION	SIZE RANGE MM	SAMPLE SIZING (AS REDUCED) MASS%	ASH%	FEED SIZING (DRY TUMBLED) MASS%	ASH%	PRODUCT SIZING (WET TUMBLED) MASS%	ASH%
SAMPLE 2	- 25.0 + 22.4	21.0					
SEAM							
INITIAL TOP SIZE - 25.0 MM	- 22.4 + 11.2	43.5					
RAW HGI	- 11.2 + 5.6	11.8					
	- 5.6 + 2.8	10.2					
	- 2.8 + 1.4	5.0					
	- 1.4 + 0.5WW	2.6					
	- 0.5WW + 0.0	5.9					

*** FRAME H09***

SIGNATURE :

THE SHELL COMPANY OF AUSTRALIA LTD.

STEAMING COAL PROPERTIES

GRAY

APPENDIX E5 STEAM COAL PROPERTIES

THE SHELL COMPANY OF AUSTRALIA LTD.

STEAMING COAL PROPERTIES

LEGEND

SAMPLE STATE

Col 1-4:	WTFR	Wet Tumbled. Fractional
	DTFR	Dry Tumbled. Fractional
	WTCU	Wet Tumbled. Cumulative
	DTCU	Dry Tumbled. Cumulative
	FR	Broken - Not Tumbled. Fractional
	CU	Broken - Not Tumbled. Cumulative
Col 5:	blank	
Col 6:	S	Sink Fraction
	F	Float Fraction
Col 7-10:	N.NN	Separation Relative Density

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY1

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	206.98	1.68	RAW									67
1	206.98	1.68	CU F1.55					1590	>1600	>1600	>1600	68

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY2

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
9	357.84	0.78	RAW									53
10	359.85	2.01	RAW									53
16	347.45	1.23	RAW					1550	>1600	>1600	>1600	
15+16	347.45	1.51	RAW					1310	1440	1470	1490	
9	357.84	0.78	CU F1.55					>1600	>1600	>1600	>1600	51
10	359.85	2.01	CU F1.55					1580	>1600	>1600	>1600	52
16-18	348.55	2.33	CU F1.80					1400	1540	1560	1580	

SIGNATURE :

*** FRAME L09***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : 6Y3

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
2	363.82	1.86	RAW									49
3	377.30	0.62	RAW									53
4	379.50	2.20	RAW									53
1	361.96	0.99	CU F1.70					1360	1430	1450	1470	44
2	363.82	1.86	CU F1.70					1450	>1600	>1600	>1600	47
3	377.30	0.62	CU F1.55					1430	>1600	>1600	>1600	49
4	379.50	2.20	CU F1.55					1550	>1600	>1600	>1600	52
5+6	441.03	1.26	CU F1.70					1570	>1600	>1600	>1600	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY4

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
7	303.92	1.77	RAW									56
9	318.52	1.44	RAW									58
7	303.92	1.77	CU F1.55					1430	>1600	>1600	>1600	55
9	318.52	1.44	CU F1.60					1540	>1600	>1600	>1600	57

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : 6Y5

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATHOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
3-5	266.00	2.24	CU F1.65					1420	1580	1590	1600	
3-5	266.00	2.24	CU F1.80					1430	>1600	>1600	>1600	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY6A

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1+2	263.92	1.42	CU F1.70					1580	>1600	>1600	>1600	

SIGNATURE :

*** FRAME D10***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY7

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1+2	254.60	2.59	CU F1.70					1430	1530	1550	1570	
3	281.76	1.03	CU F1.70					1550	>1600	>1600	>1600	
5+6	316.43	2.11	CU F1.50					1400	1560	1580	1590	51
4-6	316.43	2.60	CU F1.80					1450	>1600	>1600	>1600	48

SIGNATURE :

*** FRAME E10***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY9

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
6	269.41	1.39	RAW					1300	1580	1590	1590	
8	284.51	1.01	RAW					1420	>1600	>1600	>1600	
10	337.68	1.07	RAW					1390	>1600	>1600	>1600	
6	269.41	1.39	CU F1.60					1410	1550	1560	1570	
8	284.51	1.01	CU F1.60					1510	>1600	>1600	>1600	
10	337.68	1.07	CU F1.70					1400	>1600	>1600	>1600	

SIGNATURE :

*** FRAME F10***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY10

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
9	365.64	1.26	CU F1.50					1430	1520	1530	1540	
			CU F1.80					1360	1430	1450	1460	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY11

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	PSH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	264.60	2.20	RAW									57
2	311.23	1.27	RAW					1380	1460	1490	1500	59
4	327.40	1.43	RAW					1450	>1600	>1600	>1600	
5	381.24	0.89	RAW					1400	>1600	>1600	>1600	
1	264.60	2.20	CU F1.80					1400	>1600	>1600	>1600	
2	311.23	1.27	CU F1.60					1400	1520	1530	1540	
3+4	327.40	2.76	CU F1.80					1550	>1600	>1600	>1600	

SIGNATURE :

*** FRAME H10***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY12

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
8	378.64	1.86	RAW					1550	>1600	>1600	>1600	54
11	381.52	1.21	RAW					>1600	>1600	>1600	>1600	59
8	378.64	1.86	CU F1.80					1580	>1600	>1600	>1600	57
11	381.52	1.21	CU F1.80					1480	>1600	>1600	>1600	59

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY14

SAMPLE SIZE : - 38.1 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
7-9	267.29	1.19	RAW					1380	>1600	>1600	>1600	56
10-13	281.30	2.59	RAW					1350	>1600	>1600	>1600	58
14	330.91	1.15	RAW					1370	>1600	>1600	>1600	60

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY17

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	468.27	1.52	RAW					1280	1570	>1585	>1600	51
3	485.49	1.95	RAW					>1600	>1600	>1600	>1600	53
1	468.27	1.52	CU F1.80					1420	>1600	>1600	>1600	
3	483.49	1.95	CU F1.80					>1600	>1600	>1600	>1600	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY18

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
2	222.80	1.51	RAW					>1600	>1600	>1600	>1600	54
			CU F1.80					>1600	>1600	>1600	>1600	

SIGNATURE :

*** FRAME L10***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY20

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	436.41	2.06	RAW					>1600	>1600	>1600	>1600	
3	438.95	0.71	RAW					1480	>1600	>1600	>1600	
1	436.41	2.06	FR F1.70					>1600	>1600	>1600	>1600	
3	438.95	0.71	FR F1.70					1450	1580	1590	1600	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY23

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
3	341.05	0.20	RAW					1480	>1600	>1600	>1600	
			FR F1.70					1450	1580	1590	1600	47
4	342.24	1.19	FR F1.70					1490	1580	>1600	>1600	49

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY25

SAMPLE SIZE : - 25.0 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
3	477.01	1.68	RAW					1350	1370	1400	1430	
			FR F1.70					1550	>1600	>1600	>1600	47
4+5	479.34	2.33	FR F1.70					1490	>1600	>1600	>1600	45

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY27

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	349.19	2.03	RAW					1570	>1600	>1600	>1600	54
			CU F1.70					>1600	>1600	>1600	>1600	
2	351.16	1.97	CU F1.70					1590	>1600	>1600	>1600	

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY29

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	281.58	1.55	FR F1.70					1510	>1600	>1600	>1600	47
6	287.24	1.44	FR F1.70					1550	>1600	>1600	>1600	46

SIGNATURE :

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GY30

SAMPLE SIZE : - 25.4 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	266.79	2.73	FR F1.70					1570	>1600	>1600	>1600	60
4	269.32	1.22	FR F1.70					1580	>1600	>1600	>1600	68

SIGNATURE :

*** FRAME F11***

STEAMING COAL PROPERTIES

GRAY

(All Results on Air Dried Basis unless otherwise indicated by Letter Symbol between Brackets)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 45.0 + 22.4 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH FUSION TEMPERATURES (DEGREES CELSIUS) OXIDISING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	REDUCING ATMOSPHERE DEF	SPHER	HEMIS	FLOW	HARDGROVE GRINDABILITY INDEX
1	2.52	2.51	WTCU F1.70	>1500	>1600	>1600	>1600					45

SIGNATURE :

*** FRAME G11***

THE SHELL COMPANY OF AUSTRALIA LTD.

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

APPENDIX E6 ULTIMATE AND ELEMENTAL ANALYSIS

*** FRAME H11***

THE SHELL COMPANY OF AUSTRALIA LTD.

ULTIMATE AND ELEMENTAL ANALYSIS

LEGEND

ULTIMATE AND ELEMENTAL ANALYSIS BASES

	AIR DRIED
A	AS RECEIVED
R	DRY BASIS
D	DRY, ASH FREE
C	DRY, MINERAL MATTER FREE
E	ESTIMATED VALUE

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY1

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 1	206.98	1.68		RAW								0.090		
Sample 1	206.98	1.68	CU	F1.55	75.20	4.12	18.68	1.55	0.45 (D)	0.070				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY2

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 9	357.84	0.78		RAW								0.070		
Sample 10	359.85	2.01		RAW								0.090		
Sample 9	357.84	0.78	CU	F1.50	74.20	4.40	19.50	1.43	0.47 (D)	0.100				
Sample 10	359.85	2.01	CU	F1.55	82.90	4.65	10.55	1.42	0.48 (D)	0.140				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY3

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 2	363.82	1.86		RAW								0.050		
Sample 3	377.30	0.62		RAW								0.080		
Sample 4	379.50	2.20		RAW								0.050		
Sample 1	361.96	0.99	CU	F1.70	83.10	5.22	9.76	1.47	0.45 (D)	0.260				
Sample 2	363.82	1.86	CU	F1.70	83.40	4.80	9.93	1.47	0.40 (D)	0.220				
Sample 3	377.30	0.62	CU	F1.55	83.00	4.78	10.47	1.38	0.37 (D)	0.210				
Sample 4	379.50	2.20	CU	F1.55	83.30	4.70	9.94	1.45	0.61 (D)	0.190				

SIGNATURE :

*** FRAME L11***

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY4

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 7	303.92	1.77		RAW								0.080		
Sample 9	318.52	1.44		RAW								0.050		
Sample 7	303.92	1.77	CU	F1.55	79.00	4.34	14.95	1.34	0.37 (D)	0.100				
Sample 9	318.52	1.44	CU	F1.60	82.80	4.32	8.55	1.45	0.45 (D)	0.100				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY12

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 8	378.64	1.86		RAW	80.40	4.88	12.88	1.40	0.44 (D)	0.220				
Sample 11	381.52	1.21		RAW	82.50	4.62	10.94	1.46	0.48 (D)	0.100				
Sample 8	378.64	1.86	CU	F1.80	78.90	4.41	14.82	1.44	0.43 (D)	0.460				
Sample 11	381.52	1.21	CU	F1.80	81.00	4.50	12.52	1.53	0.45 (D)	0.030				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY14

SAMPLE SIZE : - 38.1 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ULTIMATE ANALYSIS CARBON X	HYDROG X	OXYGEN X	NITROG X	SULPHUR X	CARBONATE X	ELEMENTAL ANALYSIS PHOSPHORUS X	CHLORINE X	ARSENIC PPM	FLUORINE X
Composite of Samples 7-9	267.29	1.19	RAW	71.20	4.41	22.86	1.17	0.86 (D)	0.140				
Composite of Samples 10-13	281.30	2.59	RAW	79.60	4.94	13.75	1.35	0.36 (D)	0.660				
Sample 14	330.91	1.15	RAW	90.60	5.82	1.68	1.54	0.36 (D)	0.210				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY17

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 1	468.27	1.52		RAW	82.00	5.12	10.97	1.42	0.49 (D)	0.110				
Sample 3	483.49	1.95		RAW	81.60	4.76	11.77	1.38	0.49 (D)	0.150				
Sample 1	468.27	1.52	CU	F1.80	82.20	4.80	11.07	1.48	0.45 (D)	0.080				
Sample 3	483.49	1.95	CU	F1.80	82.00	4.90	11.30	1.42	0.38 (D)	0.160				

SIGNATURE :

*** FRAME D12***

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GY18

SAMPLE SIZE : - 12.7 + 0.0 MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M		SAMPLE STATE	ULTIMATE ANALYSIS CARBON %	HYDROG %	OXYGEN %	NITROG %	SULPHUR %	CARBONATE %	ELEMENTAL ANALYSIS PHOSPHORUS %	CHLORINE %	ARSENIC PPM	FLUORINE %
Sample 2	222.80	1.51		RAW	81.60	4.57	11.96	1.46	0.41 (D)	0.090				
Sample 2	222.80	1.51	CU	F1.80	81.60	4.41	12.27	1.31	0.41 (D)	0.180				

SIGNATURE :

ULTIMATE AND ELEMENTAL ANALYSIS

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 45.0 + 0.5W MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ULTIMATE ANALYSIS CARBON X	HYDROG X	OXYGEN X	NITROG X	SULPHUR X	CARBONATE X	ELEMENTAL ANALYSIS PHOSPHORUS X	CHLORINE X	ARSENIC PPM	FLUORINE X
Sample 1	2.52	2.51	WTCU F1.70	82.10	4.54	11.33	1.46	0.37 (D)	0.040	0.003	0.200		(D)

SIGNATURE :

*** FRAME F12***

THE SHELL COMPANY OF AUSTRALIA LTD.

ASH ANALYSIS

GRAY

APPENDIX E7 ASH ANALYSIS

*** FRAME G12***

ASH ANALYSIS

GRAY

BOREHOLE : GY1

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	SO3 %	MN304 %	MN203 %
Sample 1	206.98	1.68	CU F1.55	67.40	21.60	1.68	3.86	0.73	0.46	0.23	0.90	0.01	0.38	0.01	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY2

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 9	357.84	0.78	CU F1.55	69.90	22.20	1.21	3.31	0.48	0.17	0.20	0.76	0.02	0.35	0.03	
Sample 10	359.85	2.01	CU F1.55	66.80	24.80	1.65	3.38	0.37	0.28	0.18	0.32	0.02	0.10	0.03	

SIGNATURE :

*** FRAME I12***

ASH ANALYSIS

GRAY

BOREHOLE : GY3

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE		ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 1	361.96	0.99	CU	F1.70	64.50	23.50	1.10	6.91	0.47	0.97	0.12	0.70	0.02	0.05	0.06	
Sample 2	363.82	1.86	CU	F1.70	62.90	28.50	1.19	3.40	0.50	0.85	0.10	0.60	0.03	0.08	0.05	
Sample 3	377.30	0.62	CU	F1.55	66.30	27.00	1.07	1.73	0.40	0.41	0.14	0.77	0.02	0.05	0.02	
Sample 4	379.50	2.20	CU	F1.55	61.50	30.60	1.19	3.16	0.56	0.71	0.15	0.65	0.03	0.08	0.02	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY4

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 7	303.92	1.77	CU F1.55	67.00	26.10	0.86	3.08	0.54	0.43	0.14	0.60	0.01	0.10	0.02	
Sample 9	318.52	1.44	CU F1.70	59.00	32.20	1.30	4.10	0.56	0.75	0.16	0.70	0.03	0.08	0.02	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY12

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 8	378.64	1.86	RAW	55.70	37.30	1.00	2.30	1.90	0.48	0.22	0.29	0.04	0.53	0.04	
Sample 11	381.52	1.21	RAW	55.80	37.40	1.36	2.82	0.96	0.82	0.25	0.32	0.03	0.07	0.04	
Sample 8	378.64	1.86	CU F1.80	55.50	34.60	1.30	2.88	3.10	0.58	0.25	0.32	0.05	1.12	0.05	
Sample 11	381.52	1.21	CU F1.80	57.30	36.10	1.09	2.71	0.95	0.83	0.29	0.29	0.03	0.11	0.04	

SIGNATURE :

ASH ANALYSIS

GRAY

BORENOLE : 6Y14

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Composite of Samples 7-9	267.29	1.19	RAW	60.80	30.00	0.71	3.82	1.85	0.42	0.25	0.80	0.01	0.69	0.02	
Composite of Samples 10-13	281.30	2.59	RAW	56.90	33.10	0.91	2.96	3.10	0.33	0.21	0.92	0.01	0.88	0.02	
Sample 14	330.91	1.15	RAW	57.80	34.90	1.10	3.68	0.29	0.12	0.26	0.68	0.01	0.07	0.01	

SIGNATURE :

*** FRAME A13***

ASH ANALYSIS

GRAY

BOREHOLE : GY17

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA2O %	K2O %	P2O5 %	SO3 %	MN3O4 %	MN2O3 %
Sample 1	468.27	1.52	RAW	67.60	24.10	0.81	3.14	0.79	0.98	0.27	1.83	0.02	0.15	0.04	
Sample 3	483.49	1.95	RAW	57.40	34.20	1.28	2.68	0.58	0.71	0.26	0.65	0.03	0.10	0.04	
Sample 1	468.27	1.52	CU F1.80	66.50	25.40	0.72	3.62	0.88	0.92	0.25	1.10	0.04	0.12	0.05	
Sample 3	483.49	1.95	CU F1.80	59.50	32.60	1.28	3.09	0.24	0.51	0.28	0.46	0.06	0.08	0.03	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY18

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TI02 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 2	222.80	1.51	RAW	59.60	32.00	1.36	3.04	0.50	0.81	0.35	0.69	0.03	0.25	0.04	
Sample 2	222.80	1.51	CU F1.80	60.60	30.40	1.45	3.09	0.66	0.91	0.36	0.54	0.02	0.17	0.03	

SIGNATURE :

*** FRAME C13***

ASH ANALYSIS

GRAY

BOREHOLE : GY27

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL2O3 %	TIO2 %	FE2O3 %	CAO %	MGO %	NA2O %	K2O %	P2O5 %	SO3 %	MN3O4 %	MN2O3 %
Sample 1	237.57	2.62	F1.70	61.20	32.20	1.38	2.73	1.36	0.50	0.26	0.54	0.04	0.23	0.06	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY29

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL2O3 %	TIO2 %	FE2O3 %	CAO %	MGO %	NA2O %	K2O %	P2O5 %	SO3 %	MN3O4 %	MN2O3 %
Sample 1	281.58	1.55	F1.70	67.90	23.00	0.84	4.24	1.23	0.73	0.19	0.94	0.17	0.10	0.06	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GY30

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL2O3 %	TIO2 %	FE2O3 %	CAO %	MGO %	NA2O %	K2O %	P2O5 %	SO3 %	MN3O4 %	MNO2 %
Sample 1	266.79	2.73	FR F1.70	60.20	33.30	1.57	2.52	0.84	0.40	0.20	0.45	0.25	0.01	0.04	

SIGNATURE :

ASH ANALYSIS

GRAY

BOREHOLE : GYDRA1

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	ASH ANALYSIS SIO2 %	AL203 %	TIO2 %	FE203 %	CAO %	MGO %	NA20 %	K20 %	P205 %	S03 %	MN304 %	MN203 %
Sample 1	2.52	2.51	WTCU F1.70	67.60	26.50	1.08	2.72	0.59	0.65	0.01	0.78	0.03	0.01	0.03	

SIGNATURE :

THE SHELL COMPANY OF AUSTRALIA LTD.

FORMS OF SULPHUR

GRAY

APPENDIX E8 FORMS OF SULPHUR

*** FRAME H13***

THE SHELL COMPANY OF AUSTRALIA LTD.

FORMS OF SULPHUR

LEGEND

TOTAL SULPHUR AND FORMS OF SULPHUR BASIS

AIR DRIED
A AS RECEIVED
R DRY BASIS

RO MAX BASIS

OIL
A AIR
G GLYCERINE

*** FRAME I13***

FORMS OF SULPHUR

GRAY

(ALL RESULTS ON AIR DRIED BASIS UNLESS OTHERWISE INDICATED BY LETTER SYMBOL BETWEEN BRACKETS)

BOREHOLE : GYDRA1

SAMPLE SIZE : - 45.0 + 0.5WW MM

SAMPLE NUMBER	DEPTH TO BASE M	THICKNESS M	SAMPLE STATE	TOTAL SULPHUR %	------FORMS OF SULPHUR----- PYRITIC %	ORGANIC %	SULPHATE %	RO MAX %
Sample 1	2.52	2.51	WTCU F1.70	0.28	0.09	0.18	0.01	0.64

SIGNATURE :

THE SHELL COMPANY OF AUSTRALIA LTD.

MACERAL REPORT

GRAY

APPENDIX E9 MACERAL ANALYSIS REPORT

*** FRAME K13***

MACEPAL ANALYSIS

MACEPAL ANALYSIS

REPORT

Size -45.00 + 0.5mm WT CU F1.70

EAN MAXIMUM REFLECTANCE =0.64% (Based on 100 measurements)

EFLECTANCE MEASUREMENTS AT 546 n m LIGHT WAVELENGTH

IL REFRACTIVE INDEX =1.5180

		NEW MACERAL CLASSIFICATION			
MACERAL	VOLUME %	MACERAL	VOLUME %	MACERAL GROUP	VOLUME %
Vitrinite	35	Vitrinite	35	Vitrinite	35
Resinite	1	Resinite	1		
Sporinite	2	Sporinite	2	Exinite	8
Cutinite	5	Cutinite	5		
Fusinite	2	Fusinite	2		
		Semi fusin	43		
Semi fusin.	43	Macrinite	7r	Inertinite	50
		Sclerotin.	--		
		Micrinite	--		
		Inertodetr.	5		
Mineral Matter	7	Mineral Matter	7	Mineral Matter	7

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

APPENDIX
MT NICHOLAS
BOREHOLE GEOLOGICAL DESCRIPTIONS

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 24

HOLE TYPE	CORE
EASTING	592,495 M AM GRID
NORTHING	5,401,075 M AM GRID
ELEVATION	603.80 M
TOTAL DEPTH DRILLED	366.50 M
DRILLING STARTED	7/ 3/80
DRILLING TIME	35 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	BENTONITIC MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
106.30	106.30	65		100% DOLERITE	SCREE, MED.-COARSE GRAINED, GREY-GREEN, HIGHLY WEATHERED, STRONG ROCK. NOTE: INTERSPERSED BANDS WEATHERED TO CLAY
106.43	0.13	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, FIRM.
106.60	0.17	100		100% CARBONACEOUS MUDSTONE	SLIGHTLY WEATHERED, FIRM.
106.63	0.03	100		100% MUDSTONE	LIGHT GREY, SLIGHTLY WEATHERED, FIRM.
106.69	0.06	100		100% CARBONACEOUS MUDSTONE	SLIGHTLY WEATHERED, FIRM.
106.83	0.14	100		100% MUDSTONE	GREY, FIRM.
			BASE OF WEATHERING		
107.00	0.17	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY STRONG ROCK.
107.17	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
107.50	0.33	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
108.84	1.34	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
108.90	0.06	100		100% MUDSTONE	GREY, WITH CALCITE, MODERATELY WEAK ROCK.
110.83	1.93	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
111.58	0.75	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
112.00	0.42	0		CORE LOSS	
113.65	1.65	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
113.89	0.24	100		100% SANDSTONE,FINE GRAINED	CREAM, VERY WEAK ROCK.
114.79	0.90	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
116.33	1.54	100		65% CARBONACEOUS MUDSTONE 35% SANDSTONE,FINE GRAINED	LIGHT GREY. MODERATELY WEAK ROCK.
119.06	2.73	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
119.11	0.05	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
119.53	0.42	100		50% CLAYSTONE 50% CARBONACEOUS MUDSTONE	CREAM. BLACK. WEAK ROCK.
120.05	0.52	100		100% CLAYSTONE	WHITE, STIFF.
121.04	0.99	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, MODERATELY WEAK ROCK.
121.40	0.36	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	INTERCALATIONS, GREY. MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
121.47	0.07	100		100% MUDSTONE	CREAM, WITH ABUNDANT CALCITE, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
121.57	0.10	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, MODERATELY WEAK ROCK.
122.58	1.01	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
123.19	0.61	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, THICKLY LAMINATED.
123.70	0.51	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, THINLY LAMINATED.
123.79	0.09	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
123.87	0.08	100		100% COAL, BRIGHT	
124.14	0.27	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
124.30	0.16	100		100% COAL, DULL	
125.14	0.84	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, MODERATELY WEAK ROCK.
125.21	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
125.28	0.07	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
125.37	0.09	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY STRONG ROCK.
125.40	0.03	100		100% COAL, DULL	UNWEATHERED, MODERATELY STRONG ROCK.
125.42	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
125.57	0.15	100		100% COAL, DULL	UNWEATHERED, MODERATELY STRONG ROCK.
125.76	0.19	100		100% MUDSTONE	ARENACEOUS, LIGHT BROWN, WEAK ROCK.
125.89	0.13	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
126.37	0.48	100		100% MUDSTONE	DARK GREY, MODERATELY WEAK ROCK.
126.46	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
126.53	0.07	100		100% COAL, HEAVY DULL	
126.57	0.04	100		100% MUDSTONE	BROWN, WEAK ROCK.
126.71	0.14	100		100% COAL, DULL	
127.39	0.68	100		100% MUDSTONE	COALY, LENSES, GREY, MODERATELY WEAK ROCK.
127.64	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, INTERCALATIONS, LIGHT BROWN, MODERATELY STRONG ROCK, WITH POOR SORTING.
127.76	0.12	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
128.00	0.24	0		CORE LOSS	
128.02	0.02	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK.
128.14	0.12	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
128.18	0.04	100		100% SANDSTONE,FINE GRAINED	WHITE, VERY WEAK ROCK.
128.29	0.11	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
128.32	0.03	100		100% SANDSTONE,FINE GRAINED	CREAM, WEAK ROCK.
				TOP OF MT. NICHOLAS UPPER 8 : 475.48 M R.L.	
128.34	0.02	100		100% COAL, DULL	
128.36	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, WEAK ROCK.
128.51	0.15	100		100% COAL, DULL	
128.59	0.08	100		100% COAL, INTERBANDED DULL AND BRIGHT	
128.61	0.02	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
128.62	0.01	100		100% MUDSTONE	CREAM, MODERATELY WEAK ROCK.
128.67	0.05	100		100% COAL, DULL	
128.70	0.03	100		100% COAL, BRIGHT	
128.84	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
128.87	0.03	100		100% SANDSTONE,FINE GRAINED	CREAM, MODERATELY STRONG ROCK.
129.13	0.26	100		100% COAL, DULL	
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.81 M; SAMPLED THICKNESS= 0.00 M	
129.22	0.09	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.
134.82	5.60	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
146.05	11.23	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, MODERATELY STRONG ROCK.
146.49	0.44	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH POOR SORTING.
158.00	11.51	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
158.18	0.18	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
158.35	0.17	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	GREY. INTERCALATIONS, LIGHT GREY. MODERATELY STRONG ROCK.
158.84	0.49	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
158.95	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
158.97	0.02	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
159.53	0.56	100		100% SANDSTONE,FINE GRAINED	COALY, PARTINGS, LIGHT GREY, MODERATELY STRONG ROCK.
159.90	0.37	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
159.97	0.07	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
160.15	0.18	100		100% CARBONACEOUS MUDSTONE	SANDSTONE, LENSES, DARK GREY.
			TOP OF	MT. NICHOLAS MIDDLE 1 : 443.65 M R.L.	
160.17	0.02	100	1	100% CARBONACEOUS SHALE	DARK GREY.
160.25	0.08	100	1	100% COAL, DULL	
160.27	0.02	100	1	100% COAL, BRIGHT WITH FEW DULL BANDS	
160.33	0.06	100	1	100% COAL, BRIGHT	SHALY, PARTINGS.
160.35	0.02	100	1	100% MUDSTONE	LIGHT BROWN.
160.41	0.06	100	1	100% CARBONACEOUS SHALE	
160.45	0.04	100	1	100% CARBONACEOUS MUDSTONE	GREY-BROWN.
160.59	0.14	100	1	100% COAL, HEAVY DULL	MUDSTONE, PARTINGS.
160.62	0.03	100	1	100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
160.67	0.05	100	1	100% MUDSTONE	BROWN, WITH NODULES OF SIDERITE.
160.72	0.05	100	1	100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BLACK.
160.83	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON FRACTURES AND PYRITE ON FRACTURES.
160.86	0.03	100	1	100% COAL, HEAVY DULL	
160.88	0.02	100	1	100% MUDSTONE	BROWN.
161.00	0.12	100	1	100% COAL, HEAVY DULL	
161.31	0.31	100	1	100% COAL, DULL	BRIGHT COAL, BANDS, WITH CALCITE ON FRACTURES.
161.32	0.01	100	1	100% MUDSTONE	BROWN.
161.38	0.06	100	1	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS.
161.43	0.05	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON FRACTURES.
161.45	0.02	100	1	100% MUDSTONE	BROWN.
161.69	0.24	100	1	100% COAL, DULL	HEAVY DULL COAL, BANDS.
161.77	0.08	100	1	100% COAL, BRIGHT	
161.84	0.07	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	HEAVY DULL COAL, BANDS.
			BASE OF	MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.69 M; SAMPLED THICKNESS= 1.69 M	
161.95	0.11	100	2	100% MUDSTONE	GREY, VERY STRONG ROCK.
162.02	0.07	100	2	100% COAL, DULL	
162.13	0.11	100	2	100% MUDSTONE	COALY, FRAGMENTS, GREY-GREEN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
162.22	0.09	100	2	100% CARBONACEOUS SHALE	BRIGHT COAL, BANDS.
162.27	0.05	100	2	100% COAL, DULL	
162.29	0.02	100	2	100% MUDSTONE	GREY.
162.35	0.06	100	2	100% COAL, DULL	
162.37	0.02	100	2	100% MUDSTONE	DARK GREY.
162.41	0.04	100	2	100% COAL, DULL	
162.44	0.03	100	2	100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, BROWN.
162.66	0.22	100	2	100% MUDSTONE	GREY-GREEN.
162.72	0.06	100	2	100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, BROWN.
162.77	0.05	100	2	100% COAL, HEAVY DULL	
162.80	0.03	100	2	100% MUDSTONE	GREY, VERY STRONG ROCK.
162.94	0.14	100	2	100% COAL, HEAVY DULL	WITH PYRITE ON FRACTURES.
162.95	0.01	100	2	100% MUDSTONE	CREAM, VERY STRONG ROCK.
163.04	0.09	100	2	100% COAL, DULL	
163.18	0.14	100	2	100% MUDSTONE	COALY, LENSES, DARK GREY, VERY STRONG ROCK.
163.24	0.06	100	2	100% CARBONACEOUS SHALE	COALY, LENSES.
163.30	0.06	100	2	100% COAL, DULL	
163.34	0.04	100	2	100% COAL, BRIGHT WITH FEW DULL BANDS	
163.39	0.05	100	3	100% CARBONACEOUS SHALE	COALY, LENSES.
163.41	0.02	100	3	100% MUDSTONE	DARK BROWN, HIGHLY WEATHERED.
163.45	0.04	100	3	100% CARBONACEOUS SHALE	COALY, LENSES.
163.49	0.04	100	3	100% MUDSTONE	GREY, MODERATELY WEAK ROCK.
164.00	0.51	100		100% MUDSTONE	GREY.
164.25	0.25	100		100% CARBONACEOUS MUDSTONE	BLACK, WITH LENSES OF CALCITE, MODERATELY WEAK ROCK.
164.80	0.55	100		100% MUDSTONE	GREY, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
164.84	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, TIGHT NON PLANAR, WITH SLICKENSIDES.
166.16	1.32	100		100% MUDSTONE	GREY, VERY WIDELY SPACED JOINTS, TIGHT NON PLANAR, WITH SLICKENSIDES.
166.48	0.32	100		100% MUDSTONE	DARK GREY.
167.00	0.52	100		100% CARBONACEOUS MUDSTONE	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
167.33	0.33	100		100% COAL, HEAVY DULL	
167.47	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEAK ROCK.
167.66	0.19	100		100% SANDSTONE	VERY FINE GRAINED, GREY, MODERATELY STRONG ROCK.
167.96	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK.
168.65	0.69	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
170.58	1.93	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK.
170.75	0.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, VERY STRONG ROCK.
171.10	0.35	100		100% MUDSTONE	SILTSTONE, BANDS.
				TOP OF MT. NICHOLAS MIDDLE 2 : 432.70 M R.L.	
171.47	0.37	100		100% COAL, DULL	WITH CALCITE ON CLEAT.
171.54	0.07	100		100% MUDSTONE	GREY, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
171.62	0.08	100		100% COAL, HEAVY DULL	
172.13	0.51	100		100% COAL, DULL	
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.03 M; SAMPLED THICKNESS= 0.00 M	
172.29	0.16	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, DARK BROWN.
172.33	0.04	100		100% MUDSTONE	GREY.
172.64	0.31	100		100% MUDSTONE	LIGHT GREY.
172.70	0.06	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
172.87	0.17	100		100% MUDSTONE	LIGHT GREY.
173.21	0.34	100		100% SANDSTONE	MUDSTONE, BANDS, LIGHT GREY.
173.43	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY.
173.65	0.22	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CROSS LAMINATION.
176.00	2.35	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY.
186.50	10.50	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
186.73	0.23	100		100% CARBONACEOUS SHALE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
		TOP OF MT. NICHOLAS MIDDLE 3 : 417.07 M R.L.			
186.78	0.05	100		100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
186.80	0.02	100		100% COAL, BRIGHT WITH FEW DULL BANDS	SHALY, PARTINGS.
186.84	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, PARTINGS.
		BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.11 M; SAMPLED THICKNESS= 0.00 M			
186.87	0.03	100		100% MUDSTONE	DARK GREY.
187.20	0.33	100		100% MUDSTONE	LIGHT GREY.
187.50	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
188.64	1.14	100		100% MUDSTONE	LIGHT GREY.
188.90	0.26	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
189.11	0.21	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY.
189.56	0.45	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
190.23	0.67	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, GREY-GREEN, UNWEATHERED, VERY STRONG ROCK.
190.46	0.23	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. SILTSTONE, LAMINAE, LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
190.63	0.17	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
190.74	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
190.79	0.05	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
191.82	1.03	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
195.99	4.17	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED. VERY STRONG ROCK.
202.60	6.61	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
203.27	0.67	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, EXTREMELY SRONG ROCK.
203.56	0.29	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
203.69	0.13	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
206.52	2.83	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
206.63	0.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
207.24	0.61	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
207.71	0.47	100		80% CARBONACEOUS SHALE 20% COAL, DULL	BLACK. UNWEATHERED, VERY STRONG ROCK.
208.00	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
209.47	1.47	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
210.87	1.40	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
212.77	1.90	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
213.49	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, EXTREMLY SRONG ROCK.
213.88	0.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
213.99	0.11	100		95% MUDSTONE 5% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
217.07	3.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
217.95	0.88	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
219.25	1.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
219.64	0.39	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK, WITH CARBONACEOUS WISPS.
221.60	1.96	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,COARSE GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK, WITH MUD PELLETS.
221.71	0.11	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
222.20	0.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
222.38	0.18	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, EXTREMELY SRONG ROCK, WITH CARBONACEOUS WISPS.
222.42	0.04	100		50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS SHALE	GREY. BLACK. UNWEATHERED, VERY STRONG ROCK.
224.94	2.52	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, VERY STRONG ROCK.
225.17	0.23	100		75% SANDSTONE,MEDIUM GRAINED 25% SILTSTONE	LIGHT GREY. LAMINAE. UNWEATHERED, VERY STRONG ROCK.
226.04	0.87	100		50% SANDSTONE,COARSE GRAINED 50% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
226.06	0.02	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
226.42	0.36	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
226.74	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
227.27	0.53	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.
227.81	0.54	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	GREY. GREY. UNWEATHERED, VERY STRONG ROCK.
228.29	0.48	100		100% MUDSTONE	GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS.
228.86	0.57	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
229.08	0.22	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK.
229.23	0.15	100		90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
230.12	0.89	100		100% MUDSTONE	GREY, UNWEATHERED, VERY STRONG ROCK, WITH PLANT REMAINS.
230.35	0.23	100		00% MUDSTONE	GREY.
230.46	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
231.00	0.54	100		100% MUDSTONE	SILTSTONE, LENSES, GREY.
231.29	0.29	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
231.68	0.39	100		100% MUDSTONE	GREY.
232.08	0.40	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY.
233.38	1.30	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY.
234.66	1.28	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY.
235.05	0.39	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY.
236.12	1.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT GREY.
236.37	0.25	100		100% MUDSTONE	COALY, DARK GREY, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG.
236.69	0.32	100		100% SANDSTONE	SILTSTONE, BANDS, DARK GREY.
237.07	0.38	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, LIGHT GREY.
237.17	0.10	100		100% CARBONACEOUS MUDSTONE	DARK BROWN.
240.72	3.55	100		100% MUDSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
241.42	0.70	100		100% MUDSTONE	SANDSTONE, BANDS, GREY-GREEN.
241.72	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, INTERCALATIONS.
245.22	3.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY-GREEN, VERY THICKLY BEDDED.
245.92	0.70	100		100% SILTSTONE	GREY, THICKLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
246.21	0.29	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MEDIUM BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
246.26	0.05	100	4	100% SILTSTONE	MUDSTONE, BANDS, LIGHT GREY, VERY THINLY BEDDED, VERY WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS LOWER 2 : 357.54 M R.L.	
246.38	0.12	100	5	100% COAL, HEAVY DULL	VERY WIDELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
246.40	0.02	100	5	100% CARBONACEOUS MUDSTONE	DARK GREY.
246.66	0.26	100	5	100% COAL, HEAVY DULL	
246.68	0.02	100	5	100% MUDSTONE	BROWN.
246.70	0.02	100	5	100% MUDSTONE	GREY.
247.25	0.55	100	5	90% COAL, DULL 10% COAL, HEAVY DULL	
247.27	0.02	100	5	100% MUDSTONE	GREY.
247.46	0.19	100	5	90% COAL, DULL 10% COAL, DULL WITH FEW BRIGHT BANDS	
247.48	0.02	100	5	100% MUDSTONE	BROWN.
247.75	0.27	100	5	100% COAL, HEAVY DULL	BADLY BROKEN.
247.82	0.07	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	
248.03	0.21	100	5	90% COAL, HEAVY DULL 10% COAL, DULL	
248.10	0.07	100	5	100% COAL, DULL	
248.13	0.03	100	5	100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY.
248.19	0.06	100	5	100% COAL, DULL	
248.25	0.06	100	5	100% SILTSTONE	COALY, TRACES, LIGHT BROWN.
248.53	0.28	100	5	100% COAL, DULL	
248.76	0.23	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
248.77	0.01	100	5	100% MUDSTONE	GREY.
248.80	0.03	100	5	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN.
249.22	0.42	100	5	90% COAL, HEAVY DULL 10% COAL, DULL	
249.28	0.06	100	5	100% COAL, HEAVY DULL	SHALY, BANDS.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 3.02 M; SAMPLED THICKNESS= 3.02 M	
249.81	0.53	100		100% MUDSTONE	GREY, MEDIUM BEDDED.
251.22	1.41	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, MEDIUM BEDDED.
251.64	0.42	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT GREY, MEDIUM BEDDED.
252.24	0.60	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, THICKLY BEDDED.
252.68	0.44	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, MEDIUM BEDDED.
252.74	0.06	100		100% SILTSTONE	GREY.
254.47	1.73	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE.
254.82	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY.
255.37	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, LIGHT GREY.
255.59	0.22	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY.
256.27	0.68	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LENSES, LIGHT GREY.
257.00	0.73	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, GREY.
258.52	1.52	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES.
260.22	1.70	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, GREY.
260.69	0.47	100		90% COAL, DULL 10% COAL, HEAVY DULL	
260.72	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN.
261.09	0.37	100		90% COAL, DULL 10% COAL, HEAVY DULL	
261.13	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN.
265.28	4.15	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, LIGHT GREY, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
265.63	0.35	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY-BROWN.
265.78	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
266.26	0.48	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, LIGHT GREY.
266.40	0.14	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, BROWN.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
266.53	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK.
266.56	0.03	100		100% MUDSTONE	BROWN.
266.62	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK.
266.75	0.13	100		100% COAL, HEAVY DULL	
266.99	0.24	100		100% CARBONACEOUS MUDSTONE	BLACK.
267.09	0.10	100		100% COAL, HEAVY DULL	COARSE GRAINED, BANDS.
269.14	2.05	100		100% SILTSTONE	FINE GRAINED SANDSTONE, BANDS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
271.36	2.22	100		100% MUDSTONE	GREY, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG.
273.06	1.70	100		100% CARBONACEOUS MUDSTONE	DARK GREY, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
273.92	0.86	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, BANDS.
276.02	2.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE.
276.22	0.20	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY.
277.17	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE.
278.00	0.83	100		100% MUDSTONE	GREY-BROWN.
278.07	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK.
278.16	0.09	100		100% SANDSTONE,MEDIUM GRAINED	WHITE.
278.31	0.15	100		100% MUDSTONE	GREY-BROWN.
279.11	0.80	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.
279.56	0.45	100		100% MUDSTONE	GREY.
279.63	0.07	100		100% MUDSTONE	DARK GREY.
280.18	0.55	100		100% CARBONACEOUS MUDSTONE	HEAVY DULL COAL, BANDS.
281.02	0.84	100		100% CARBONACEOUS MUDSTONE	GREY.
281.43	0.41	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
281.69	0.26	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
281.70	0.01	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, STRONG ROCK.
281.73	0.03	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
282.08	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
284.00	1.92	100		100% MUDSTONE	SANDSTONE, STREAKS, GREY, UNWEATHERED, STRONG ROCK.
284.19	0.19	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
286.33	2.14	100		100% MUDSTONE	SANDSTONE, STREAKS, GREY, UNWEATHERED, STRONG ROCK.
287.08	0.75	100		100% MUDSTONE	SANDSTONE, STREAKS, BLACK, UNWEATHERED, STRONG ROCK.
287.23	0.15	100		100% MUDSTONE	SANDSTONE, STREAKS, BLACK, UNWEATHERED, STRONG ROCK.
287.25	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
287.32	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, BLACK, UNWEATHERED, STRONG ROCK.
287.55	0.23	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, UNWEATHERED, STRONG ROCK.
288.56	1.01	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, STRONG ROCK.
289.17	0.61	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	MUDSTONE, STREAKS, GREY. SANDSTONE, STREAKS, GREY. UNWEATHERED, STRONG ROCK.
289.91	0.74	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
289.95	0.04	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
290.12	0.17	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, GREY, UNWEATHERED, STRONG ROCK.
290.82	0.70	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
291.20	0.38	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
292.33	1.13	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
293.20	0.87	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, GREY, UNWEATHERED, STRONG ROCK.
293.59	0.39	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
293.64	0.05	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
293.93	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
294.11	0.18	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
295.80	1.69	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
296.03	0.23	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
296.26	0.23	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK.
297.00	0.74	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
299.27	2.27	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, GREY. GREY. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
299.41	0.14	100		100% COAL, DULL	UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
299.44	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
299.52	0.08	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
299.70	0.18	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
299.89	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
299.96	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
300.33	0.37	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK.
300.40	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
300.51	0.11	100		100% SILTSTONE	GREY, UNWEATHERED, STRONG ROCK.
300.54	0.03	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
300.64	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, STRONG ROCK.
300.74	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
300.76	0.02	100		100% CARBONACEOUS SHALE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
301.11	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
301.24	0.13	100		100% SANDSTONE,FINE GRAINED	BLACK, UNWEATHERED, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
301.88	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
302.69	0.81	100		100% CARBONACEOUS SHALE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
302.92	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
303.16	0.24	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
305.24	2.08	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
305.27	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
305.29	0.02	100		100% MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
305.38	0.09	100		100% MUDSTONE	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS.
305.43	0.05	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	COALY, FRAGMENTS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
305.60	0.17	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, STRONG ROCK.
305.69	0.09	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, STRONG ROCK.
305.88	0.19	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, STRONG ROCK.
305.90	0.02	100		100% SILTSTONE	BLACK, UNWEATHERED, STRONG ROCK.
307.34	1.44	100		80% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED 10% SILTSTONE	SILTSTONE, LAMINAE, LIGHT GREY. SILTSTONE, LAMINAE, LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
307.73	0.39	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY.
308.60	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
308.92	0.32	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
309.47	0.55	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
309.66	0.19	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
309.74	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
309.81	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
310.27	0.46	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK.
310.33	0.06	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
311.03	0.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
312.93	1.90	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, COALY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
313.32	0.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
313.45	0.13	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,COARSE GRAINED	SILTSTONE, LAMINAE, GREY. LIGHT GREY. UNWEATHERED, VERY STRONG ROCK.
314.27	0.82	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
314.84	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
316.66	1.82	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH CALCITE ON JOINTS, UNWEATHERED, STRONG ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., INFILLED WITH QUARTZ.
317.02	0.36	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
317.06	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
317.25	0.19	100		80% SILTSTONE 20% SANDSTONE,MEDIUM GRAINED	DARK GREY. SILTSTONE, LAMINAE, LIGHT GREY. UNWEATHERED, STRONG ROCK.
318.82	1.57	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	SILTSTONE, LAMINAE, LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
318.96	0.14	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH MUD PELLETS.
319.00	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
319.07	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
319.10	0.03	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
319.14	0.04	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK.
320.00	0.86	100		70% MUDSTONE 20% SANDSTONE,FINE GRAINED 10% SILTSTONE	GREY. LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK.
320.25	0.25	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
321.10	0.85	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, STRONG ROCK.
321.51	0.41	100		75% SANDSTONE,MEDIUM GRAINED 25% SILTSTONE	LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
321.64	0.13	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	LIGHT GREY. BLACK. UNWEATHERED, STRONG ROCK.
322.36	0.72	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK.
322.45	0.09	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
322.52	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
322.69	0.17	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, STRONG ROCK.
322.95	0.26	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
323.00	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
323.93	0.93	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
324.32	0.39	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
324.63	0.31	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
324.74	0.11	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
324.78	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
325.51	0.73	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK, VERY WIDELY SPACED JOINTS.
325.61	0.10	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	GREY. BLACK. UNWEATHERED, STRONG ROCK.
325.78	0.17	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	LIGHT GREEN. BLACK. UNWEATHERED, VERY STRONG ROCK.
326.00	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, EXTREMELY SRONG ROCK.
327.36	1.36	100		80% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,COARSE GRAINED 10% MUDSTONE	LIGHT GREY. LIGHT GREY. GREY. UNWEATHERED, EXTREMELY SRONG ROCK.
327.39	0.03	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREEN, WITH NODULES OF PYRITE, UNWEATHERED, EXTREMELY SRONG ROCK.
327.74	0.35	100		100% MUDSTONE	GREY-GREEN, WITH FRAGMENTS OF QUARTZ, UNWEATHERED, STRONG ROCK.
366.50	38.76	100		100% MUDSTONE	GREY, WITH FRAGMENTS OF QUARTZ, UNWEATHERED, STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	128.32 - 129.13 M	0.81 M
M1	1.69 M	160.15 - 161.84 M	1.69 M
M2	0.00 M	171.10 - 172.13 M	1.03 M
M3	0.00 M	186.73 - 186.84 M	0.11 M
L2	3.02 M	246.26 - 249.28 M	3.02 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	160.15 - 161.84 M	1.69 M
2	161.84 - 163.34 M	1.50 M
3	163.34 - 163.49 M	0.15 M
4	246.21 - 246.26 M	0.05 M
5	246.26 - 249.28 M	3.02 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 26

HOLE TYPE	CORE
EASTING	591,246 M AM GRID
NORTHING	5,400,770 M AM GRID
ELEVATION	610.60 M
TOTAL DEPTH DRILLED	340.86 M
DRILLING STARTED	15/ 4/80
DRILLING TIME	27 DAYS
CORE SIZE	61.1 MM
[illegible]E SIZE	96.1 MM
[illegible]H CASED	
IN[illegible]IAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	BENTONITIC MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.14	109.14	85		100% DOLERITE	SCREE, HIGHLY WEATHERED.
109.19	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, WEAK ROCK.
109.26	0.07	100		100% CLAY	CREAM, COMPLETELY WEATHERED, SOFT.
109.28	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, WEAK ROCK.
109.36	0.08	100		100% CLAY	CREAM, COMPLETELY WEATHERED, SOFT.
109.44	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, SLIGHTLY WEATHERED, WEAK ROCK.
109.53	0.09	100		100% MUDSTONE	BUFF, SLIGHTLY WEATHERED, WEAK ROCK.
109.55	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
			BASE OF WEATHERING		
109.87	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.23	0.36	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
110.32	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH TROUGH CROSS BEDDING.
110.88	0.56	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
111.00	0.12	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
111.23	0.23	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
113.58	2.35	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.79	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEATHERED, VERY WEAK ROCK.
113.83	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
114.86	1.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.04	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, MODERATELY WEATHERED, VERY WEAK ROCK.
115.80	0.76	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
117.13	1.33	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	ARENACEOUS, LENSES, GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
118.12	0.99	100		100% MUDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
118.34	0.22	100		100% COAL, DULL	BRIGHT COAL, LENSES.
118.39	0.05	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
118.54	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
118.63	0.09	100		100% TONSTEIN	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.68	0.05	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.80	0.12	100		100% COAL, HEAVY DULL	
119.44	0.64	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.59	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
120.06	0.47	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.12	0.06	100		100% MUDSTONE	CREAM, WITH INTERCALATIONS OF CALCITE, UNWEATHERED, WEAK ROCK.
120.20	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
123.85	3.65	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.73	0.88	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.76	0.03	100		100% COAL, BRIGHT	
125.07	0.31	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.19	0.12	100		100% MUDSTONE	GREEN-BROWN, UNWEATHERED, WEAK ROCK.
125.28	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.71	0.43	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
127.20	1.49	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.34	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.37	0.03	100		100% MUDSTONE	COALY, FRAGMENTS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
127.48	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.73	0.25	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, WITH GRANULAR QUARTZ, UNWEATHERED, MODERATELY WEAK ROCK.
127.88	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
127.95	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.03	0.08	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
128.14	0.11	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
129.43	1.29	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, COALY, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
129.53	0.10	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK. CREAM. UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.92	1.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
131.12	0.20	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.14	0.02	100		100% SANDSTONE,MEDIUM GRAINED	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
131.21	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.29	0.08	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
				TOP OF MT. NICHOLAS UPPER 8 : 479.31 M R.L.	
131.56	.27	100		100% COAL, DULL	
131.58	.2	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.77	0.19	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
131.78	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
132.06	0.28	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
132.07	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
132.32	0.25	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 1.03 M; SAMPLED THICKNESS= 0.00 M	
132.36	0.04	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
133.62	1.26	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
137.75	4.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH TROUGH CROSS BEDDING, LAMINATED.
143.01	5.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
149.25	6.24	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
149.64	0.39	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
150.24	0.60	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
150.45	0.21	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
150.84	0.39	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT BROWN, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
153.85	3.01	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
154.34	0.49	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
154.55	0.21	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
154.80	0.25	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
154.87	0.07	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
155.99	1.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
156.16	0.17	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
156.52	0.36	100		100% COAL, HEAVY DULL	
156.85	0.33	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
157.20	0.35	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
158.02	0.82	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
158.70	0.68	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
159.32	0.62	100		70% SANDSTONE 30% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, GREY. UNWEATHERED, STRONG ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.
160.09	0.77	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
160.22	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
160.30	0.08	100		100% MUDSTONE	GREEN-BROWN, WITH ABUNDANT CALCITE, UNWEATHERED, WEAK ROCK.
160.38	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 450.22 M R.L.	
160.78	0.40	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
160.92	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.96	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
161.07	0.11	100		100% MUDSTONE	GREEN-BROWN, UNWEATHERED, WEAK ROCK.
161.24	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
161.30	0.06	100		100% MUDSTONE	GREEN-BROWN, UNWEATHERED, WEAK ROCK.
161.44	0.14	100		100% COAL, DULL	BRIGHT COAL, BANDS.
161.48	0.04	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
161.54	0.06	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
161.58	0.04	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
161.65	0.07	100		100% COAL, BRIGHT WITH FEW DULL BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
161.67	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
161.83	0.16	100		100% COAL, DULL	WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.45 M; SAMPLED THICKNESS= 0.00 M	
162.04	0.21	100		100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
162.06	0.02	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK.
162.29	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
162.32	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
166.25	3.93	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
166.34	0.09	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
166.38	0.04	100		50% MUDSTONE 50% CALCITE	GREY. INTERCALATIONS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
168.24	1.86	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
168.98	0.74	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
170.22	1.24	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
170.29	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
170.60	0.31	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
170.69	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
170.84	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
171.67	0.83	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
171.71	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
172.57	0.86	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
174.99	2.42	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.78	1.79	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, GREY. UNWEATHERED, STRONG ROCK, THICKLY LAMINATED, LAMINATED.
176.83	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 433.77 M R.L.	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.02	0.19	100		100% COAL, DULL	VERY WIDELY SPACED JOINTS, WITH SLICKENSIDES.
177.10	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
177.74	0.64	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WIDELY SPACED JOINTS, WITH SLICKENSIDES.
177.96	0.22	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
178.05	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.22 M; SAMPLED THICKNESS= 0.00 M	
178.15	0.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
178.53	0.38	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
178.64	0.11	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
179.78	1.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
190.12	10.34	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
				TOP OF MT. NICHOLAS MIDDLE 3 : 420.48 M R.L.	
190.80	0.68	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, VERY WIDELY SPACED JOINTS, WITH SLICKENSIDES. NOTE: SLICKENSIDE AT BASE
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.68 M; SAMPLED THICKNESS= 0.00 M	
191.32	0.52	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES.
193.28	1.96	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
196.80	3.52	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
197.20	0.40	100		100% SANDSTONE,FINE GRAINED	GRADING TO, SCREE, LIGHT GREY, UNWEATHERED, STRONG ROCK.
204.55	7.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
205.16	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
210.38	5.22	100		100% SANDSTONE,COARSE GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
214.13	3.75	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
214.28	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
216.81	2.53	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
224.93	8.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
225.08	0.15	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
225.13	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
225.30	0.17	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
226.05	0.75	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
226.18	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
226.23	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
231.29	5.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY THICKLY BEDDED, BEDS DIP 8 DEG.
234.32	3.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING.
234.92	0.60	100		100% MUDSTONE	BRECCIATED, CALCAREOUS, DARK GREY, UNWEATHERED, STRONG ROCK.
240.31	5.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
240.68	0.37	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
240.71	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, STRONG ROCK.
241.23	0.52	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
241.46	0.23	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH DISTURBED BEDDING.
241.76	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
241.80	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
242.08	0.28	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
242.19	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
242.31	0.12	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
242.38	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
242.45	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
242.80	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
242.85	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
242.97	0.12	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
243.00	0.03	100		100% CLAY	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
243.40	0.40	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
244.10	0.70	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, STRONG ROCK.
245.30	1.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
247.33	2.03	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
248.28	0.95	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
248.30	0.02	100		100% MUDSTONE	WHITE, WITH QUARTZ, UNWEATHERED, EXTREMELY SRONG ROCK.
248.66	0.36	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
248.88	0.22			75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
249.27	0.39			100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
249.64	0.37			75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK.
249.80	0.16			100% MUDSTONE	GREY, WITH LENSES OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
250.29	0.49			100% MUDSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
		TOP OF	MT. NICHOLAS LOWER 1 : 360.31 M R.L.		
250.53	0.24		1	100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
250.56	0.03		1	100% CLAYSTONE	UNWEATHERED, NON SLAKING, NON STICKY.
250.65	0.09		1	100% COAL, HEAVY DULL	
250.68	0.03		1	100% CLAYSTONE	KAOLINITIC, DARK GREY, UNWEATHERED, NON SLAKING, NON STICKY.
250.81	0.13		1	100% COAL, HEAVY DULL	
250.83	0.02		1	100% MUDSTONE	KAOLINITIC, DARK GREY.
250.86	0.03		1	100% CARBONACEOUS MUDSTONE	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
251.13	0.27		2	100% COAL, DULL	WITH CALCITE ON JOINTS, UNWEATHERED.
251.16	0.03		2	100% MUDSTONE	KAOLINITIC, CREAM, UNWEATHERED, NON SLAKING, NON STICKY.
251.29	0.13		2	100% COAL, DULL	
251.36	0.07		2	100% COAL, DULL WITH FEW BRIGHT BANDS	
251.38	0.02		2	100% MUDSTONE	CREAM.
251.51	0.13		2	100% COAL, DULL	
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.22 M; SAMPLED THICKNESS= 1.22 M			
251.60	0.09			100% COAL, HEAVY DULL	CARBONACEOUS, BANDS.
251.61	0.01			100% MUDSTONE	CREAM.
251.62	0.01			100% CARBONACEOUS MUDSTONE	BLACK.
251.83	0.21			100% CARBONACEOUS MUDSTONE	DARK GREY.
252.29	0.46			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
252.54	0.25			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
		TOP OF MT. NICHOLAS LOWER 2 : 358.06 M R.L.			
252.82	0.28		3	100% COAL, HEAVY DULL	
253.00	0.16		4	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
253.08	0.08		4	100% COAL, DULL	
253.11	0.03		4	100% MUDSTONE	BROWN.
253.34	0.23		4	100% COAL, DULL	
253.37	0.03		4	100% COAL, BRIGHT	
253.44	0.07		4	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	
253.74	0.30		4	100% COAL, DULL	
253.79	0.05		4	100% MUDSTONE	KAOLINITIC, WHITE.
253.84	0.05		4	100% COAL, DULL	
253.88	0.04		4	100% MUDSTONE	KAOLINITIC, WHITE.
253.94	0.06		4	100% COAL, HEAVY DULL	
254.24	0.30		4	100% COAL, DULL	
254.27	0.03		4	100% CLAYSTONE	CREAM, UNWEATHERED, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
254.38	0.11		4	100% COAL, DULL	
254.58	0.20		4	100% COAL, DULL WITH FEW BRIGHT BANDS	
254.92	0.34		4	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
255.02	0.10		4	100% COAL, HEAVY DULL	
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.48 M; SAMPLED THICKNESS= 2.48 M	
255.58	0.56			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
255.95	0.37			75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
256.80	0.85			75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
257.70	0.90			100% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LENSES, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
258.59	0.89			95% SANDSTONE,COARSE GRAINED 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PEBBLY. UNWEATHERED, STRONG ROCK.
267.10	8.51			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
267.49	0.39			90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. PEBBLY. UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
267.62	0.13			100% MUDSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
267.68	0.06			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
267.75	0.07			100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
267.79	0.04			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
268.13	0.34			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
268.60	0.47			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, STRONG ROCK.
272.23	3.63			100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
272.43	0.20			100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
272.66	0.23			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
272.81	0.15			100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
272.84	0.03			100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
272.87	0.03			100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
272.95	0.08			100% SANDSTONE,FINE GRAINED	PEBBLY, LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
273.19	0.24			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
273.61	0.42			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
273.67	0.06			100% COAL, DULL	
276.03	2.36			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.35	0.32			100% CARBONACEOUS MUDSTONE	PEBBLY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
277.80	1.45			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
278.42	0.62			100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
278.87	0.45			100% COAL, HEAVY DULL	
279.38	0.51			100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK.
279.70	0.32			100% SANDSTONE,MEDIUM GRAINED	GREY.
279.73	0.03			100% MUDSTONE	GREY.
283.29	3.56			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
283.40	0.11			100% SANDSTONE,COARSE GRAINED	POORLY SORTED, LIGHT GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
283.62	0.22			100% SANDSTONE,FINE GRAINED	LIGHT GREY.
284.32	0.70			100% MUDSTONE	LIGHT BROWN.
284.43	0.11			100% MUDSTONE	DARK GREY.
284.58	0.15			100% COAL, DULL	
284.88	0.30			100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, BROWN.
285.42	0.54			100% SANDSTONE,MEDIUM GRAINED	CREAM.
286.41	0.99			100% MUDSTONE	ARENACEOUS, BANDS, GREEN-BROWN.
286.51	0.10			100% MUDSTONE	DARK GREY.
286.72	0.21			100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY. NOTE: ORANGE FLECKING THROUGHOUT
286.80	0.08			100% COAL, BRIGHT	
287.28	0.48			100% SANDSTONE,FINE GRAINED	DARK GREY, UNWEATHERED, MODERATELY STRONG ROCK.
288.42	1.14			100% MUDSTONE	DARK GREY.
288.93	0.51			100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, UNWEATHERED, WITH DISTURBED BEDDING.
290.58	1.65			100% MUDSTONE	DARK GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
291.63	1.05			100% SANDSTONE	MED.-FINE GRAINED, GREY-GREEN.
291.75	0.12			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
293.21	1.46			100% MUDSTONE	GREY.
293.74	0.53			100% CARBONACEOUS MUDSTONE	BLACK.
294.54	0.80			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN.
299.62	5.08			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
302.49	2.87			100% SANDSTONE,MEDIUM GRAINED	POORLY SORTED, PEBBLY, LIGHT GREY, UNWEATHERED, WITH CARBONACEOUS WISPS.
307.79	5.30			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
308.16	0.37			100% MUDSTONE	GREY.
308.54	0.38			100% CARBONACEOUS MUDSTONE	BLACK.
308.69	0.15			100% SANDSTONE,MEDIUM GRAINED	CREAM.
309.46	0.77			100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, BLACK.
309.60	0.14			100% COAL, DULL WITH FEW BRIGHT BANDS	
310.20	0.60			100% MUDSTONE	GREY.
312.20	2.00			100% MUDSTONE	DARK GREY.
314.14	1.94			50% SANDSTONE 50% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, CARBONACEOUS, DARK GREY. LIGHT GREY. UNWEATHERED, THINLY BEDDED, LAMINATED.
326.64	12.50			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
326.67	0.03			100% COAL, DULL	
327.03	0.36			100% CARBONACEOUS MUDSTONE	BLACK.
327.76	0.73			50% MUDSTONE 50% SANDSTONE,FINE GRAINED	DARK GREY. GREY. UNWEATHERED, MEDIUM BEDDED, LAMINATED.
329.21	1.45			100% MUDSTONE	GREY.
329.50	0.29			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY.
330.80	1.30			100% MUDSTONE	GREY.
331.67	0.87			80% SANDSTONE 20% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, THINLY BEDDED, LAMINATED.
332.75	1.08			100% MUDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS.
332.80	0.05			100% COAL, INTERBANDED DULL AND BRIGHT	
332.83	0.03			100% SANDSTONE,MEDIUM GRAINED	COALY, BLACK.
332.86	0.03			100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
334.18	1.32			100% MUDSTONE	ARENACEOUS, BANDS, GREY.
334.35	0.17			100% CARBONACEOUS MUDSTONE	ARENACEOUS, DARK GREY.
334.93	0.58			100% SANDSTONE,MEDIUM GRAINED	CREAM, UNWEATHERED, WITH CARBONACEOUS WISPS.
335.12	0.19			100% SANDSTONE,MEDIUM GRAINED	SILTY, GREY.
335.61	0.49			100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, WITH POOR SORTING.
338.49	2.88			100% SANDSTONE,MEDIUM GRAINED	GREY.
338.80	0.31			100% SANDSTONE	VERY COARSE GRAINED, LIGHT GREY, UNWEATHERED, WITH POOR SORTING.
339.20	0.40			100% SANDSTONE,COARSE GRAINED	LIGHT GREY.
340.80	1.60			100% SANDSTONE	VERY FINE GRAINED, GREY, WITH PEBBLY QUARTZ, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	131.29 - 132.32 M	1.03 M
M1	0.00 M	160.38 - 161.83 M	1.45 M
M2	0.00 M	176.83 - 178.05 M	1.22 M
M3	0.00 M	190.12 - 190.80 M	0.68 M
L1	1.22 M	250.29 - 251.51 M	1.22 M
L2	2.48 M	252.54 - 255.02 M	2.48 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	250.29 - 250.86 M	0.57 M
2	250.86 - 251.51 M	0.65 M
3	252.54 - 252.82 M	0.28 M
4	252.82 - 255.02 M	2.20 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 28

HOLE TYPE	CORE
EASTING	590,902 M AM GRID
NORTHING	5,399,594 M AM GRID
ELEVATION	593.48 M
TOTAL DEPTH DRILLED	335.00 M
DRILLING STARTED	15/ 5/80
DRILLING TIME	12 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	BENTONITIC MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
65.57	65.57	85		100% DOLERITE	SCREE, GREY-GREEN, MODERATELY WEATHERED, VERY STRONG ROCK.
65.64	0.07	100		100% CLAY	CREAM, SOFT.
				BASE OF WEATHERING	
65.87	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
66.93	1.06	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
68.20	1.27	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
68.35	0.15	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
68.45	0.10	100		100% CARBONACEOUS MUDSTONE	GRADING TO, MUDSTONE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
68.57	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
69.03	0.46	100		100% SANDSTONE,FINE GRAINED	GRADING TO, CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
69.30	0.27	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH DISTURBED BEDDING.
70.07	0.77	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, BLACK. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH DISTURBED BEDDING, WITH TROUGH CROSS BEDDING.
70.98	0.91	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
71.23	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
71.75	0.52	100		100% SANDSTONE,FINE GRAINED	MEDIUM GRAINED, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, LAMINATED, WITH CARBONACEOUS WISPS.
72.03	0.28	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.13	1.10	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.49	0.36	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.72	1.23	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
74.74	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.10	0.36	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
75.16	0.06	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK. NOTE: WITH SMALL ANGULAR WHITE PEBBLES

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
76.11	0.95	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED.
76.74	0.63	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, VERY WEAK ROCK.
76.86	0.12	100		100% COAL, DULL	UNWEATHERED.
76.90	0.04	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
77.00	0.10	100		100% SANDSTONE,MEDIUM GRAINED	BUFF, UNWEATHERED, STRONG ROCK.
77.03	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.05	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
77.21	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.23	0.02	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, FIRM.
77.41	0.18	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.62	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.70	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.78	0.08	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, CREAM, UNWEATHERED, STRONG ROCK.
77.90	0.12	100		100% COAL, DULL	UNWEATHERED.
77.95	0.05	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
78.10	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
78.17	0.07	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, STRONG ROCK.
78.31	0.14	100		100% COAL, HEAVY DULL	UNWEATHERED.
78.38	0.07	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
78.52	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
78.66	0.14	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
78.71	0.05	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
79.74	1.03	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
79.80	0.06	100		100% SANDSTONE,FINE GRAINED	COALY, TRACES, CREAM, UNWEATHERED, MODERATELY STRONG ROCK.
79.99	0.19	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
80.05	0.06	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
80.44	0.39	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
80.57	0.13	100		100% SANDSTONE,FINE GRAINED	DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.86	0.29	100		100% COAL, DULL	UNWEATHERED.
80.95	0.09	100		100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
81.06	0.11	100		100% COAL, DULL	MUDSTONE, LENSES, UNWEATHERED.
81.30	0.24	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
81.56	0.26	100		100% COAL, DULL	UNWEATHERED.
81.59	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
81.71	0.12	100		100% COAL, DULL	UNWEATHERED.
81.96	0.25	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
82.71	0.75	100		100% COAL, DULL	UNWEATHERED.
83.00	0.29	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
83.50	0.50	100		100% COAL, DULL	UNWEATHERED.
84.21	0.71	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
84.46	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
84.79	0.33	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
84.96	0.17	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
84.98	0.02	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
85.02	0.04	100		100% COAL, DULL	UNWEATHERED.
85.55	0.53	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
85.62	0.07	100		100% COAL, DULL	UNWEATHERED.
85.66	0.04	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
86.09	0.43	100		100% COAL, DULL	UNWEATHERED.
86.20	0.11	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, MODERATELY STRONG ROCK, THINLY LAMINATED, WITH POOR SORTING.
86.32	0.12	100		100% COAL, DULL	UNWEATHERED.
86.34	0.02	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
86.43	0.09	100		100% COAL, DULL	UNWEATHERED.
86.53	0.10	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
86.57	0.04	100		100% COAL, DULL	UNWEATHERED.
86.59	0.02	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
86.97	0.38	100		100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
87.20	0.23	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
87.49	0.29	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED.
87.82	0.33	100		100% MUDSTONE	COALY, BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
87.97	0.15	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
88.13	0.16	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED.
88.16	0.03	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
88.54	0.38	100		100% COAL, DULL	UNWEATHERED.
88.60	0.06	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
88.80	0.20	100		100% COAL, DULL	UNWEATHERED.
88.82	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
88.99	0.17	100		100% COAL, DULL	UNWEATHERED.
89.07	0.08	100		50% COAL, DULL 50% MUDSTONE	LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
89.22	0.15	100		100% COAL, DULL	UNWEATHERED.
89.25	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
89.36	0.11	100		100% COAL, DULL	UNWEATHERED.
89.41	0.05	100		100% SANDSTONE,FINE GRAINED	BUFF, UNWEATHERED, MODERATELY STRONG ROCK.
89.45	0.04	100		100% COAL, DULL	UNWEATHERED.
89.50	0.05	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, BUFF, UNWEATHERED, MODERATELY STRONG ROCK.
89.70	0.20	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
89.76	0.06	100		100% SANDSTONE,FINE GRAINED	CREAM, UNWEATHERED, MODERATELY STRONG ROCK.
89.81	0.05	100		100% COAL, DULL	UNWEATHERED.
89.83	0.02	100		100% CLAYSTONE	WAXY, CREAM, UNWEATHERED, STIFF.
89.97	0.14	100		100% COAL, DULL	UNWEATHERED.
90.03	0.06	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.08	0.05	100		100% COAL, DULL	UNWEATHERED.
90.10	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.25	0.15	100		100% COAL, DULL	UNWEATHERED.
90.28	0.03	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
90.32	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.42	0.10	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
90.49	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.52	0.03	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, STIFF.
90.61	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.64	0.03	100		100% CLAYSTONE	WAXY, BUFF, UNWEATHERED, FIRM.
90.98	0.34	100		100% COAL, DULL	UNWEATHERED.
91.05	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
94.38	3.33	100		100% MUDSTONE	GREY, UNWEATHERED.
94.41	0.03	100		100% COAL	BADLY BROKEN, UNWEATHERED.
97.18	2.77	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.31	0.13	100		100% MUDSTONE	CREAM, WITH STREAKS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
97.43	0.12	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.51	0.08	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
97.72	0.21	100		100% MUDSTONE	ARENACEOUS, LENSES, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.79	0.07	100		100% CLAY	DARK GREY, UNWEATHERED, FIRM.
98.09	0.30	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
99.33	1.24	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, LAMINATED.
				TOP OF MT. NICHOLAS UPPER 8 : 494.15 M R.L.	
99.63	0.30	100		100% COAL, DULL	UNWEATHERED.
99.65	0.02	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
99.79	0.14	100		100% COAL, DULL	UNWEATHERED.
99.88	0.09	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
100.03	0.15	100		100% COAL, DULL	UNWEATHERED.
100.18	0.15	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.85 M; SAMPLED THICKNESS= 0.00 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.28	1.10	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.30	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
101.38	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
101.51	0.13	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
103.17	1.66	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED, WITH TROUGH CROSS BEDDING.
104.53	1.36	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.04	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
105.47	0.43	100		80% MUDSTONE 20% MUDSTONE	DARK GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
105.62	0.15	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.66	0.04	100		100% MUDSTONE	CREAM, WITH ABUNDANT CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
105.87	0.21	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.46	0.59	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.06	0.60	100		100% MUDSTONE	BADLY BROKEN, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.99	0.93	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
109.71	1.72	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.97	1.26	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.05	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	
111.07	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
111.11	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
111.26	0.15	100		50% COAL, DULL WITH FEW BRIGHT BANDS 50% MUDSTONE	LIGHT BROWN. UNWEATHERED, WEAK ROCK.
111.46	0.20	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
111.81	0.35	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
112.82	1.01	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
114.95	2.13	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
115.36	0.41	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
115.41	0.05	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
115.47	0.06	100		100% COAL, BRIGHT	UNWEATHERED.
115.54	0.07	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
115.60	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
116.07	0.47	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.20	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
116.28	0.08	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
116.42	0.14	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
117.22	0.80	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
118.62	1.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
124.44	5.82	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
126.90	2.46	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
127.06	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.20	2.14	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
129.37	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
129.42	0.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
129.47	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
129.76	0.29	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
				NOTE: WITH PEBBLES	
132.04	2.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
132.27	0.23	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
132.70	0.43	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
132.76	0.06	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
132.79	0.03	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
132.84	0.05	100		100% MUDSTONE	ARENACEOUS, BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
133.67	0.83	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
135.78	2.11	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
137.30	1.52	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK. NOTE: RARE PEBBLES
138.12	0.82	0		CORE LOSS	
138.23	0.11	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
138.73	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, LAMINATED.
138.79	0.06	100	5	95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
138.83	0.04	100	5	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
138.90	0.07	100	5	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, FIRM.
138.92	0.02	100	5	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 454.56 M R.L.	
139.09	0.17	100	6	100% COAL, DULL	GRADING TO, COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
139.15	0.06	100	6	100% CARBONACEOUS MUDSTONE	GRADING TO, COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
139.33	0.18	100	6	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
139.65	0.32	100	7	100% MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLOW SLAKING, NON STICKY.
139.67	0.02	100	8	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
139.72	0.05	100	8	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
139.81	0.09	100	8	100% MUDSTONE	COALY, STREAKS, BUFF, UNWEATHERED, STIFF, SLOW SLAKING, NON STICKY.
139.96	0.15	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
139.97	0.01	100	9	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
140.04	0.07	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
140.09	0.05	100	9	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
140.10	0.01	100	9	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
140.15	0.05	100	9	80% COAL, DULL 15% MUDSTONE 5% COAL, BRIGHT	BLACK. INTERCALATIONS, BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
140.18	0.03	100	9	100% MUDSTONE	COALY, FRAGMENTS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT NON PLANAR.
140.23	0.05	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
140.25	0.02	100	9	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
140.27	0.02	100	9	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
140.29	0.02	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
140.35	0.06	100	9	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
140.38	0.03	100	9	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
140.68	0.30	100	9	99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BLACK. PELLETAL, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.70	0.02	100	10	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, NON SLAKING.
140.74	0.04	100	10	100% SILTSTONE	DARK BROWN, UNWEATHERED, MODERATELY STRONG ROCK.
140.76	0.02	100	10	100% MUDSTONE	GREY, UNWEATHERED, SOFT, WITH PLANT REMAINS.
140.79	0.03	100	10	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
140.81	0.02	100	10	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
	BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.89 M; SAMPLED THICKNESS= 1.89 M				
140.90	0.09	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.10	1.20	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
142.27	0.17	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED, BANDS, LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
142.84	0.57	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
142.95	0.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, STRONG ROCK, LAMINATED.
143.03	0.08	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
143.82	0.79	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
147.96	4.14	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
149.60	1.64	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
149.82	0.22	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK, LAMINATED, WITH DISTURBED BEDDING.
154.96	5.14	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
155.72	0.76	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, WITH TROUGH CROSS BEDDING, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
156.17	0.45	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
163.00	6.83	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
163.09	0.09	100		100% SANDSTONE	MED.-COARSE GRAINED, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
163.45	0.36	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
163.49	0.04	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING.
163.50	0.01	100		100% SANDSTONE,MEDIUM GRAINED	PEBBLY, GREY, UNWEATHERED, STRONG ROCK.
163.66	0.16	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, WITH BURROWING.
163.74	0.08	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. PEBBLY, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
163.87	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 429.61 M R.L.	
164.49	0.62	100		100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
164.62	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
		BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.75 M; SAMPLED THICKNESS= 0.00 M			
164.80	0.18	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
165.70	0.90	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
176.25	10.55	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
		TOP OF MT. NICHOLAS MIDDLE 3 : 417.23 M R.L.			
176.28	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	UNWEATHERED.
176.32	0.04	100		100% COAL, DULL	UNWEATHERED.
176.33	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.61	0.28	100		100% COAL, DULL	UNWEATHERED.
176.63	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.65	0.02	100		100% COAL, DULL	UNWEATHERED.
176.66	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.74	0.08	100		100% COAL, DULL	UNWEATHERED.
176.78	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.86	0.08	100		100% COAL, DULL	UNWEATHERED.
176.98	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.00	0.02	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
177.21	0.21	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
		BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.96 M; SAMPLED THICKNESS= 0.00 M			
177.28	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
177.45	0.17	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
177.54	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
178.32	0.78	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
179.43	1.11	100		100% PEBBLE CONGLOMERATE	MUDSTONE, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PEBBLE LINEATION, WITH POOR SORTING. NOTE: PEBBLES ARE ANGULAR
183.29	3.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
184.12	0.83	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY LAMINATED.
184.16	0.04	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
184.33	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS.
184.70	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
185.54	0.84	100		100% PEBBLE CONGLOMERATE	MUDSTONE, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
				NOTE: PEBBLES SUBROUNDED	
194.00	8.46	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
				NOTE: 187.44M:12CM MUDSTONE PEBBLE	
194.62	0.62	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
196.61	1.99	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
198.60	1.99	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
200.77	2.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
201.24	0.47	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, PEBBLY, LIGHT GREY, UNWEATHERED, STRONG ROCK.
205.84	4.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
208.41	2.57	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
211.92	3.51	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
212.39	0.47	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
215.53	3.14	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
216.02	0.49	100		90% SANDSTONE 5% MUDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. PEBBLY, GREY. FRAGMENTS. UNWEATHERED, STRONG ROCK.
218.54	2.52	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY THICKLY BEDDED, BEDS DIP 8 DEG., WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
218.90	0.36	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS. UNWEATHERED, STRONG ROCK, MEDIUM BEDDED, BEDS DIP 8 DEG., WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
219.82	0.92	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
219.84	0.02	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	UNWEATHERED.
221.15	1.31	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES, NON SLAKING.
221.93	0.78	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
222.87	0.94	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.
223.39	0.52	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
223.90	0.51	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
224.07	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
224.39	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH DISTURBED BEDDING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
224.43	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
224.71	0.28	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.99	0.28	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
225.18	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
225.40	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
225.67	0.27	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
226.20	0.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
227.83	1.63	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
228.33	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
229.67	1.34	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
229.85	0.18	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
231.34	1.49	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
232.10	0.76	100		100% MUDSTONE	FINE GRAINED SANDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
232.42	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
233.00	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK, WITH DETRITAL MUSCOVITE, UNWEATHERED, MODERATELY STRONG ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, RAPID SLAKING.
233.27	0.27	100		60% SANDSTONE 40% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK. MED.-FINE GRAINED, LIGHT GREY. WITH DETRITAL MUSCOVITE, UNWEATHERED, STRONG ROCK, THINLY LAMINATED, BEDS DIP 3 DEG.
233.79	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
234.39	0.60	100		60% SANDSTONE 40% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK. MED.-FINE GRAINED, LIGHT GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
234.93	0.54	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
				TOP OF MT. NICHOLAS LOWER 1 : 358.55 M R.L.	
234.99	0.06	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	GRADING TO, DULL COAL, UNWEATHERED, THINLY BEDDED, BEDS DIP 1 DEG.
235.05	0.06	100	1	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, UNWEATHERED.
235.38	0.33	100	1	100% COAL, DULL	UNWEATHERED.
235.40	0.02	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
235.65	0.25	100	1	100% COAL, DULL	UNWEATHERED.
235.66	0.01	100	1	100% MUDSTONE	UNWEATHERED.
235.80	0.14	100	1	100% COAL, DULL	UNWEATHERED.
236.32	0.52	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON JOINTS, UNWEATHERED.
236.42	0.10	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
236.67	0.25	100	1	100% COAL, DULL	UNWEATHERED.
236.69	0.02	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
236.70	0.01	100	1	100% CLAY	GREY, UNWEATHERED, NON SLAKING, NON STICKY.
236.80	0.10	100	1	100% COAL, DULL	UNWEATHERED.
236.85	0.05	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
236.89	0.04	100	1	100% COAL, DULL	UNWEATHERED.
236.93	0.04	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
236.94	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
236.95	0.01	100	1	100% TONSTEIN	UNWEATHERED.
237.08	0.13	100	1	100% COAL, DULL	UNWEATHERED.
237.10	0.02	100	1	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
237.11	0.01	100	1	100% COAL, BRIGHT	UNWEATHERED.
237.12	0.01	100	1	100% CLAY	COALY, STREAKS, GREY, UNWEATHERED, NON SLAKING, NON STICKY.
237.19	0.07	100	1	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED.
237.26	0.07	100	1	100% COAL, DULL	UNWEATHERED.
237.29	0.03	100	1	100% CLAY	COALY, STREAKS, CREAM, UNWEATHERED, NON SLAKING, NON STICKY.
237.33	0.04	100	1	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, UNWEATHERED.
237.46	0.13	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
237.54	0.08	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
237.56	0.02	100	1	100% COAL, BRIGHT	UNWEATHERED.
237.57	0.01	100	1	100% COAL, HEAVY DULL	UNWEATHERED.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.64 M; SAMPLED THICKNESS= 2.64 M	
238.74	1.17	100		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, RAPID SLAKING.
238.83	0.09	100	2	100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, STRONG ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS.
				TOP OF MT. NICHOLAS LOWER 2 : 354.65 M R.L.	
238.90	0.07	100	3	100% COAL, DULL	UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
239.00	0.10	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
239.56	0.56	100	3	100% COAL, DULL	BADLY BROKEN, UNWEATHERED.
239.80	0.24	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
239.81	0.01	100	3	100% COAL, BRIGHT	UNWEATHERED.
240.00	0.19	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
240.02	0.02	100	3	100% CLAY	KAOLINITIC, PELLETAL, CREAM, UNWEATHERED, NON SLAKING. NON STICKY.
240.07	0.05	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
240.10	0.03	100	3	100% CLAY	KAOLINITIC, PELLETAL, CREAM, UNWEATHERED, NON SLAKING, NON STICKY.
240.32	0.22	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
240.34	0.02	100	3	100% COAL, BRIGHT	UNWEATHERED.
240.37	0.03	100	3	100% TONSTEIN	UNWEATHERED.
240.45	0.08	100	3	100% COAL, DULL	UNWEATHERED.
240.48	0.03	100	3	100% COAL, BRIGHT	UNWEATHERED.
240.67	0.19	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
240.69	0.02	100	3	100% COAL, BRIGHT	UNWEATHERED.
240.73	0.04	100	3	100% COAL, DULL	UNWEATHERED.
240.83	0.10	100	3	100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
240.85	0.02	100	3	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	UNWEATHERED.
240.87	0.02	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.04 M; SAMPLED THICKNESS= 2.04 M	
240.98	0.11	100	4	100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
241.59	0.61	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
242.38	0.79	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., WITH TROUGH CROSS BEDDING, WIDELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
246.71	4.33	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
257.39	10.68	100		60% SANDSTONE 40% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. MEDIUM GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 12 DEG.
258.00	0.61	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. MEDIUM GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH BURROWING, WITH TROUGH CROSS BEDDING.
258.23	0.23	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.
260.16	1.93	100		50% SANDSTONE 50% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH BURROWING, WITH TROUGH CROSS BEDDING.
261.06	0.90	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
262.90	1.84	100		100% CARBONACEOUS MUDSTONE	FINE GRAINED SANDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
263.29	0.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, TIGHT NON PLANAR, WITH SLICKENSIDES.
263.80	0.51	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY STRONG ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
263.93	0.13	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
264.23	0.30	100		100% MUDSTONE	ARENACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
264.39	0.16	100		100% MUDSTONE	WAXY, GREY-GREEN, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT PLANAR, ROUGH DISCONTINUITIES.
266.51	2.12	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT PLANAR, ROUGH DISCONTINUITIES.
266.55	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
266.74	0.19	100		100% COAL, DULL	UNWEATHERED.
266.94	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED.
267.05	0.11	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED.
267.97	0.92	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
269.00	1.03	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. CARBONACEOUS, BLACK. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
272.86	3.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
273.24	0.38	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
273.66	0.42	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
274.27	0.61	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
274.62	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
274.69	0.07	100		100% COAL, BRIGHT WITH FEW DULL BANDS	UNWEATHERED.
275.38	0.69	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
275.46	0.08	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY STRONG ROCK, WITH BIOTURBIDATION.
275.52	0.06	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.13	0.61	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
276.77	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, WITH PLANT REMAINS.
277.65	0.88	100		65% SANDSTONE,FINE GRAINED 35% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH TROUGH CROSS BEDDING, WITH FLAME/PULL STRUCTS.
279.07	1.42	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED.
279.42	0.35	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
280.89	1.47	100		50% MUDSTONE 50% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
281.88	0.99	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
284.00	2.12	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK.
284.16	0.16	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
284.47	0.31	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED.
286.51	2.04	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
287.85	1.34	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
290.36	2.51	100		100% SANDSTONE	MED.-FINE GRAINED. LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS.
295.05	4.69	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY. LIGHT GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
295.57	0.52	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, TIGHT PLANAR, ROUGH DISCONTINUITIES, WITH SLICKENSIDES.
295.88	0.31	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
297.17	1.29	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH DISTURBED BEDDING.
297.27	0.10	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
299.05	1.78	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
299.44	0.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, LAMINATED.
299.64	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, STRONG ROCK.
300.45	0.81	100		65% SANDSTONE,FINE GRAINED 35% MUDSTONE	LIGHT BROWN. PEBBLY, GREY. UNWEATHERED, STRONG ROCK. NOTE: PEBBLES ARE 0.5CM.WELL ROUNDED
301.11	0.66	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
301.31	0.20	100		85% SANDSTONE 15% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, STRONG ROCK, VERY THINLY BEDDED.
301.65	0.34	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
308.42	6.77	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
308.57	0.15	100		100% COAL, HEAVY DULL	BADLY BROKEN, UNWEATHERED.
308.98	0.41	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH DISTURBED BEDDING.
309.87	0.89	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
310.42	0.55	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
310.87	0.45	100		100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
311.09	0.22	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
311.83	0.74	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
312.26	0.43	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
313.59	1.33	100		100% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, WITH DISTURBED BEDDING.
313.99	0.40	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK.
314.13	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
314.18	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
314.25	0.07	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
314.30	0.05	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
316.67	2.37	100		65% MUDSTONE 20% MUDSTONE 15% SANDSTONE,FINE GRAINED	DARK GREY. GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
317.11	0.44	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK.
317.13	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
317.61	0.48	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY STRONG ROCK, LAMINATED.
318.79	1.18	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
319.71	0.92	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
319.85	0.14	100		100% CARBONACEOUS MUDSTONE	ARENACEOUS, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
320.10	0.25	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, UNWEATHERED, STRONG ROCK.
321.31	1.21	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, STRONG ROCK.
321.35	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
321.85	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH CARBONACEOUS WISPS.
322.14	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
322.20	0.06	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
322.45	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, STRONG ROCK.
322.57	0.12	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
322.91	0.34	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
323.70	0.79	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
323.82	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY STRONG ROCK.
326.13	2.31	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BANDS, LIGHT BROWN, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
329.55	3.42	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREEN, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK, WITH POOR SORTING.
				NOTE: OCCASIONAL 2CM PEBBLES	
330.06	0.51	100		100% SANDSTONE,FINE GRAINED	LIGHT GREEN, WITH PEBBLY QUARTZ, UNWEATHERED, STRONG ROCK.
335.00	4.94	100		100% SANDSTONE	VERY FINE GRAINED, DARK GREY, WITH PEBBLY QUARTZ, UNWEATHERED, VERY STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	99.33 - 100.18 M	0.85 M
M1	1.89 M	138.92 - 140.81 M	1.89 M
M2	0.00 M	163.87 - 164.62 M	0.75 M
M3	0.00 M	176.25 - 177.21 M	0.96 M
L1	2.64 M	234.93 - 237.57 M	2.64 M
L2	2.04 M	238.83 - 240.87 M	2.04 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
5	138.73 - 138.92 M	0.19 M
6	138.92 - 139.33 M	0.41 M
7	139.33 - 139.65 M	0.32 M
8	139.65 - 139.81 M	0.16 M
9	139.81 - 140.68 M	0.87 M
10	140.68 - 140.81 M	0.13 M
1	234.93 - 237.57 M	2.64 M
2	238.74 - 238.83 M	0.09 M
3	238.83 - 240.87 M	2.04 M
4	240.87 - 240.98 M	0.11 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 31

HOLE TYPE	CORE
EASTING	590,322 M AM GRID
NORTHING	5,402,186 M AM GRID
ELEVATION	417.57 M
TOTAL DEPTH DRILLED	119.96 M
DRILLING STARTED	7/ 7/80
DRILLING TIME	10 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	BENTONITIC MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
9.11	9.11	100		100% DOLERITE	SCREE.
9.33	0.22	98		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, BROWN. YELLOW. VERY WEAK ROCK.
9.49	0.16	98		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, YELLOW, VERY WEAK ROCK.
16.44	6.95	98		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, YELLOW, MODERATELY WEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 14 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES. NOTE: STRIKE OF JOINT NEARLY PERPENDICULAR TO BEDDING STRIKE JOINT DIPS TO WEST IF BED DIPS TO SOUTH
16.45	0.01	98		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, VERY WEAK ROCK.
17.41	0.96	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, WAXY, GREY, WEAK ROCK.
17.69	0.28	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,COARSE GRAINED	BLACK. FOSSILIFERROUS, GREY. VERY WEAK ROCK.
21.31	3.62	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING.
				BASE OF WEATHERING	
22.38	1.07	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, RAPID SLAKING.
22.45	0.07	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	COALY, LAMINAE, DARK GREY. GREY. MODERATELY STRONG ROCK, WITH PLANT REMAINS, RAPID SLAKING.
				TOP OF MT. NICHOLAS LOWER 2 : 395.12 M R.L.	
22.48	0.03	100	1	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, MODERATELY STRONG ROCK.
23.04	0.56	100	1	100% COAL, DULL	
23.06	0.02	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
23.47	0.41	100	1	100% COAL, DULL	
23.50	0.03	100	1	100% COAL, BRIGHT	
23.55	0.05	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	
23.81	0.26	100	1	100% COAL, DULL	GRADING TO, COALY.
23.84	0.03	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	ARGILLACEOUS, BANDS, WITH PELLETS OF KAOLINITE.
23.90	0.06	100	1	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
23.92	0.02	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	ARGILLACEOUS, BANDS, WITH PELLETS OF KAOLINITE.
23.94	0.02	100	1	100% TONSTEIN	
24.00	0.06	100	1	100% COAL, DULL	WITH PELLETS OF KAOLINITE.
24.24	0.24	100	1	100% COAL, DULL	BRIGHT COAL, BANDS.
24.31	0.07	100	1	100% COAL, DULL	BRIGHT COAL, BANDS, WITH PELLETS OF KAOLINITE.
24.35	0.04	100	1	100% COAL, BRIGHT	
24.41	0.06	100	1	100% COAL, DULL	
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.96 M; SAMPLED THICKNESS= 1.96 M	
25.89	1.48	100		100% SILTSTONE	MICACEOUS, LIGHT GREY.
25.91	0.02	100		100% COAL, BRIGHT	
27.13	1.22	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK.
27.27	0.14	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
27.36	0.09	100		100% SANDSTONE,FINE GRAINED	DARK GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
27.43	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
27.69	0.26	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, GREY, MODERATELY STRONG ROCK.
27.96	0.27	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
28.11	0.15	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK.
28.44	0.33	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS.
29.17	0.73	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK.
29.46	0.29	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY WEAK ROCK.
31.60	2.14	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK.
32.25	0.65	100		100% MUDSTONE	LIGHT GREY, MODERATELY WEAK ROCK, SLOW SLAKING.
35.98	3.73	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK, THICKLY BEDDED, BEDS DIP 5 DEG.
36.04	0.06	100		100% MUDSTONE	GREY, STRONG ROCK.
37.65	1.61	100		100% MUDSTONE	LIGHT GREY, STRONG ROCK.
37.97	0.32	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY STRONG ROCK.
38.08	0.11	100		100% MUDSTONE	WAXY, GREY-BROWN, MODERATELY STRONG ROCK.
38.51	0.43	100		100% CARBONACEOUS MUDSTONE	COALY, TRACES, BROWN-BLACK, STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.67	0.16	100		60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE	LIGHT GREY. BROWN-BLACK. STRONG ROCK.
39.64	0.97	100		100% SILTSTONE	LIGHT GREY, STRONG ROCK, WITH PLANT REMAINS.
40.15	0.51	100		70% SANDSTONE 30% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. LIGHT GREY. MODERATELY STRONG ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION.
40.58	0.43	100		100% SANDSTONE,MEDIUM GRAINED	FELDSPATHIC, LIGHT GREY, MODERATELY STRONG ROCK.
40.79	0.21	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, MODERATELY STRONG ROCK, WITH TROUGH CROSS BEDDING.
40.95	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, FELDSPATHIC, LIGHT GREY, STRONG ROCK.
41.17	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, FELDSPATHIC, LIGHT GREY, MODERATELY WEAK ROCK.
41.31	0.14	100		100% SANDSTONE	MED.-FINE GRAINED, FELDSPATHIC, LIGHT GREY, STRONG ROCK.
41.35	0.04	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY, WEAK ROCK, WITH CROSS LAMINATION.
41.39	0.04	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	WAXY, BROWN. BLACK. MODERATELY WEAK ROCK.
				NOTE: SIMILAR IN THICKNESS,COMPOSITION AND COLOURS TO THE MARKER BED,NEAR THE TOP OF THE COAL SEAMS AT THE DUNCAN MINE,FINGAL THERE IT IS KNOWN AS THE MINERS BAND.	
41.66	0.27	100		100% COAL, DULL	
41.89	0.23	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
41.96	0.07	100		100% MUDSTONE	BADLY BROKEN, BLACK, MODERATELY WEAK ROCK.
42.06	0.10	100		100% COAL, HEAVY DULL	BADLY BROKEN.
42.13	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
42.27	0.14	100		100% COAL, DULL	
42.29	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON FRACTURES.
43.75	1.46	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	BADLY BROKEN, LIGHT GREY. LIGHT GREY. STRONG ROCK, WITH PLANT REMAINS.
43.91	0.16	100		100% MUDSTONE	COALY, BADLY BROKEN, DARK GREY, MODERATELY STRONG ROCK.
44.14	0.23	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
44.30	0.16	100		50% MUDSTONE 50% CLAY	LIGHT GREY. LIGHT GREY. WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
44.77	0.47	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	BADLY BROKEN, LIGHT GREY. BADLY BROKEN, LIGHT GREY. MODERATELY WEAK ROCK, WITH PLANT REMAINS.
44.87	0.10	100		100% CARBONACEOUS MUDSTONE	COALY, TRACES, BLACK, MODERATELY STRONG ROCK.
45.43	0.56	100		100% SILTSTONE	BADLY BROKEN, LIGHT GREY, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
47.35	1.92	100		100% SILTSTONE	STRONGLY FRAGMENTED, LIGHT GREY, MODERATELY STRONG ROCK, WITH PLANT REMAINS.
47.86	0.51	100		100% CARBONACEOUS MUDSTONE	STRONGLY FRAGMENTED, BLACK, MODERATELY WEAK ROCK.
48.28	0.42	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, MODERATELY STRONG ROCK.
48.59	0.31	100		100% SILTSTONE	STRONGLY FRAGMENTED, GREY, MODERATELY WEAK ROCK.
49.24	0.65	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	COALY, BANDS, BLACK. GREY-BROWN. MODERATELY STRONG ROCK.
49.37	0.13	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	BLACK. GREY.
49.38	0.01	100		100% COAL, BRIGHT	
49.72	0.34	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	COALY, TRACES, BLACK. LIGHT GREY.
49.85	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
50.49	0.64	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, DARK GREY.
52.68	2.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CARBONACEOUS WISPS.
53.35	0.67	100		100% MUDSTONE	DARK GREY, MODERATELY STRONG ROCK.
53.78	0.43	100		100% MUDSTONE	FRAGMENTED, BLACK, MODERATELY STRONG ROCK.
56.45	2.67	100		100% SILTSTONE	GREY, STRONG ROCK.
58.69	2.24	100		70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	COALY, TRACES, GREY. COALY, TRACES, BLACK. VERY STRONG ROCK.
58.83	0.14	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	COALY, LENSES, LIGHT GREY. GREY. STRONG ROCK, WITH MUD PELLETS.
59.03	0.20	100		55% MUDSTONE 25% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	DARK GREY. COALY, TRACES, BLACK. LIGHT GREY. STRONG ROCK.
61.11	2.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
61.50	0.39	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	COALY, LENSES, LIGHT GREY. DARK GREY. STRONG ROCK, WITH MUD PELLETS.
63.74	2.24	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.97	0.23	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, VERY STRONG ROCK.
66.04	2.07	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. FELDSPATHIC, DARK GREY. VERY STRONG ROCK, WITH LOAD CASTS, WITH MUD PELLETS.
68.85	2.81	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK, PLANAR.
74.03	5.18	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK.
74.61	0.58	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, LIGHT GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
74.81	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK, WITH DISTURBED BEDDING.
76.10	1.29	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
76.15	0.05	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
76.42	0.27	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, VERY STRONG ROCK.
76.47	0.05	100		100% MUDSTONE	GREY, STRONG ROCK, TIGHT NON PLANAR, WITH SLICKENSIDES.
76.57	0.10	100		100% COAL, DULL	
76.63	0.06	100		100% COAL, BRIGHT WITH FEW DULL BANDS	
78.84	2.21	100		100% MUDSTONE	STRONGLY FRAGMENTED, LIGHT GREY, MODERATELY WEAK ROCK.
79.08	0.24	100		100% MUDSTONE	DARK GREY, STRONG ROCK.
80.40	1.32	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK, WITH CARBONACEOUS WISPS.
81.97	1.57	100		100% MUDSTONE	STRONGLY FRAGMENTED, DARK GREY, MODERATELY WEAK ROCK.
82.41	0.44	100		70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	LIGHT GREY. BLACK. VERY STRONG ROCK.
83.25	0.84	100		100% SILTSTONE	LIGHT GREY, VERY STRONG ROCK.
89.70	6.45	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, STRONG ROCK.
94.04	4.34	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
96.44	2.40	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
96.96	0.52	100		100% SILTSTONE	LIGHT GREY, MODERATELY STRONG ROCK.
98.53	1.57	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
99.06	0.53	100		70% SANDSTONE 30% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. LIGHT GREY. VERY STRONG ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.73	1.67	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, VERY STRONG ROCK.
101.25	0.52	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, VERY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
102.02	0.77	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, VERY STRONG ROCK.
102.48	0.46	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, VERY STRONG ROCK.
104.91	2.43	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK.
107.75	2.84	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK.
107.85	0.10	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
108.85	1.00	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK.
109.70	0.85	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, VERY STRONG ROCK, WITH MUD PELLETS.
110.58	0.88	100		100% SANDSTONE,FINE GRAINED	FELDSPATHIC, LIGHT GREY, STRONG ROCK.
111.28	0.70	100		70% SILTSTONE 30% SANDSTONE	STRONGLY FRAGMENTED, LIGHT GREY. VERY FINE GRAINED, GREY-GREEN. MODERATELY WEAK ROCK, VERY THINLY BEDDED.
111.74	0.46	100		55% SANDSTONE 45% SILTSTONE	VERY FINE GRAINED, GREY-GREEN. STRONGLY FRAGMENTED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
112.20	0.46	100		100% SANDSTONE,FINE GRAINED	FRAGMENTED, GREY-GREEN, MODERATELY WEAK ROCK.
112.85	0.65	100		50% SANDSTONE,FINE GRAINED 50% SILTSTONE	FRAGMENTED, GREY-GREEN. STRONGLY FRAGMENTED, LIGHT GREY. MODERATELY WEAK ROCK, THINLY BEDDED.
113.35	0.50	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, MODERATELY WEAK ROCK.
113.67	0.32	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, STRONG ROCK, WITH MUD PELLETS.
113.77	0.10	100		100% SILTSTONE	BADLY BROKEN, LIGHT GREY, WITH FRAGMENTS OF QUARTZ, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS, WITH LOAD CASTS.
114.45	0.68	100		100% MUDSTONE	GREY-GREEN, WITH FRAGMENTS OF QUARTZ, STRONG ROCK.
119.96	5.51	100		100% MUDSTONE	DARK GREY, WITH FRAGMENTS OF QUARTZ, STRONG ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L2	1.96 M	22.45 - 24.41 M	1.96 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	22.45 - 24.41 M	1.96 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 33

HOLE TYPE	CORE
EASTING	590,406 M AM GRID
NORTHING	5,398,687 M AM GRID
ELEVATION	467.17 M
TOTAL DEPTH DRILLED	132.90 M
DRILLING STARTED	20/12/80
DRILLING TIME	15 DAYS
CORE SIZE	47.6 MM
HOLE SIZE	63.5 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	BENTONITIC MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.20	0.20	100		100% SOIL	ARGILLACEOUS, BROWN, COMPLETELY WEATHERED, VERY SOFT, VERY STICKY, EFFECTIVELY IMPERMIABLE.
3.00	2.80	100		100% SANDSTONE	BUFF, HIGHLY WEATHERED, VERY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
6.10	3.10	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
6.30	0.20	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
6.40	0.10	100		100% SANDSTONE,COARSE GRAINED	BROWN, SLIGHTLY WEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: INITIAL CASING 92MM	
				*** CORE DESCRIPTION ***	
8.40	2.00	100		100% SANDSTONE,COARSE GRAINED	BUFF, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
				BASE OF WEATHERING	
				NOTE: HOLE SIZE 75MM	
9.22	0.82	100		100% SANDSTONE,COARSE GRAINED	ARKOSIC, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
9.46	0.24	100		100% SANDSTONE,COARSE GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
10.67	1.21	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, ARKOSIC, GREEN-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
10.74	0.07	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,COARSE GRAINED	INTERCALATIONS, GRADING TO, BUFF. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., NON STICKY, EFFECTIVELY IMPERMIABLE.
11.51	0.77	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, ARKOSIC, GREEN-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
12.21	0.79	100		100% SANDSTONE,COARSE GRAINED	ARKOSIC, GREEN-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
12.57	0.36	100		100% SANDSTONE,COARSE GRAINED	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
12.64	0.07	100		100% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, BROWN, UNWEATHERED, MODERATELY STRONG ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.65	1.01	100		70% SANDSTONE,COARSE GRAINED 30% SANDSTONE,MEDIUM GRAINED	ARKOSIC, BROWN. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON STICKY, EFFECTIVELY IMPERMIABLE.
14.28	0.63	100		100% SANDSTONE,COARSE GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
14.48	0.20	100		75% SANDSTONE,COARSE GRAINED 20% SANDSTONE,COARSE GRAINED 5% COAL	INTERCALATIONS, GREY. LENSES, BROWN. LENSES, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION, NON STICKY, EFFECTIVELY IMPERMIABLE.
15.15	0.67	100		80% SANDSTONE,COARSE GRAINED 20% MUDSTONE	ARKOSIC, INTERCALATIONS, GREY. LENSES, ARGILLACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT NON PLANAR, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.06	1.91	100		90% SANDSTONE,COARSE GRAINED 10% SANDSTONE,MEDIUM GRAINED	ARKOSIC, INTERCALATIONS, GREY. INTERCALATIONS, GREY. MODERATELY WEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, OPEN, PLANAR, ROUGH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.58	0.52	100		85% CARBONACEOUS SHALE 15% MUDSTONE	GRADING TO, INTERCALATIONS, BLACK. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH MUD PELLETS, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.91	0.33	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.99	0.08	100		90% MUDSTONE 10% COAL	INTERCALATIONS, GREY. LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF MT. NICHOLAS MIDDLE 1 : 449.18 M R.L.	
18.08	0.09	90		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
18.11	0.03	100		100% CARBONACEOUS SHALE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
18.22	0.11	100		100% CLAYSTONE	LENSES, CREAM, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT NON PLANAR, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
18.43	0.21	95		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 6 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, MODERATE PERMIABILITY.
18.45	0.02	100		100% CARBONACEOUS SHALE	BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, NON STICKY, MODERATE PERMIABILITY.
18.51	0.06	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY SOFT, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
18.58	0.07	100		100% CARBONACEOUS SHALE	COALY, BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, NON STICKY, MODERATE PERMIABILITY.
19.05	0.47	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, MODERATE PERMIABILITY.
BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.06 M; SAMPLED THICKNESS= 0.00 M					
19.13	0.08	100		100% CARBONACEOUS SHALE	COALY, BLACK, WITH CRYSTALLINE PYRITE, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON STICKY, MODERATE PERMIABILITY.
19.29	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: SOLUABLE	OIL ADDED TO DRILL WATER
20.20	0.91	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. INTERCALATIONS, LENSES, GREY. UNWEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
				*** CHIP DESCRIPTION ***	
23.10	2.90			60% SANDSTONE 40% CARBONACEOUS SHALE	COALY, BLACK.
				*** CORE DESCRIPTION ***	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
23.51	0.41	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
23.55	0.04	100		100% COAL, HEAVY DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
23.60	0.05	100		100% CLAYSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, VERY SOFT, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
23.64	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
23.68	0.04	100		100% CARBONACEOUS SHALE	COALY, DARK BROWN, UNWEATHERED, WEAK ROCK, BEDS DIP 4 DEG., NON STICKY, SLIGHT PERMIABILITY.
23.70	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
					NOTE: JOINTS INTERSECT AT 85 DEG
23.72	0.02	100		100% CARBONACEOUS SHALE	COALY, DARK BROWN, UNWEATHERED, WEAK ROCK, NON STICKY, SLIGHT PERMIABILITY.
23.75	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
23.79	0.04	100		100% MUDSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
23.79	0.04	100		%	VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
					NOTE: 85 DEG BETWEEN JOINTS
23.82	0.03	100		95% CARBONACEOUS SHALE 5% COAL	ARGILLACEOUS, INTERCALATIONS, BROWN. LENSES, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, NON STICKY, SLIGHT PERMIABILITY.
24.25	0.43	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, WITH SLICKENSIDES, NON STICKY, SLIGHT PERMIABILITY.
					NOTE: SLICKENSIDES PARALLEL TO MAX ANGLE
24.29	0.04	100		60% CARBONACEOUS SHALE 40% COAL	INTERCALATIONS, LENSES, DARK BROWN. DULL COAL, LENSES, BLACK. UNWEATHERED, WEAK ROCK, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
24.34	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
24.42	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
24.43	0.01	100		100% CARBONACEOUS SHALE	DARK BROWN, UNWEATHERED, VERY WEAK ROCK, BEDS DIP 8 DEG., NON STICKY, SLIGHT PERMIABILITY.
24.58	0.15	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT NON PLANAR, NON STICKY, SLIGHT PERMIABILITY.
24.64	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
24.73	0.09	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
24.79	0.06	100		80% COAL, DULL 20% CARBONACEOUS SHALE	INTERCALATIONS, BLACK. INTERCALATIONS, LENSES, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 7 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
25.10	0.31	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 57 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, EFFECTIVELY IMPERMIABLE.
27.32	2.22	100		95% SANDSTONE,COARSE GRAINED 5% SANDSTONE,MEDIUM GRAINED	ARKOSIC, INTERCALATIONS, GREY. ARGILLACEOUS, GREY. UNWEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: REAMED AND CASED WITH 11CM PVC TO 26M	
28.16	0.84	100		100% SANDSTONE,MEDIUM GRAINED	SCREE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
28.20	0.04	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	SCREE, INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.45	1.25	100		100% SANDSTONE,COARSE GRAINED	ARKOSIC, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.62	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
36.55	6.93	100		100% SANDSTONE,COARSE GRAINED	MED.-COARSE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
37.20	0.65	100		100% MUDSTONE	ARGILLACEOUS, GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, NON STICKY, EFFECTIVELY IMPERMIABLE.
37.92	0.72	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 7 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 63 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
					NOTE: SLICKENSIDES PARALLEL TO MAX ANGLE SHEARS INTERSECT AT 70 DEG.NORMAL 0.5CM DISP
38.00	0.08	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, WITH FLAME/PULL STRUCTS, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
38.35	0.35	100		100% MUDSTONE	GRADING TO BASE, MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., NON STICKY, EFFECTIVELY IMPERMIABLE.
38.72	0.37	100		80% MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY. FINE GRAINED, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
39.30	0.58	100		100% SANDSTONE,COARSE GRAINED	GRADING TO BASE, SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TRACE FOSSILS, NON STICKY, EFFECTIVELY IMPERMIABLE.
39.43	0.13	100		70% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY-BROWN. FINE GRAINED, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, NON STICKY, EFFECTIVELY IMPERMIABLE.
39.80	0.37	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED SANDSTONE, GRADING TO BASE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
39.90	0.10	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY-BROWN. FINE GRAINED, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.33	0.43	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GRADING TO BASE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.49	0.16	100		50% SANDSTONE,COARSE GRAINED 50% MUDSTONE	INTERCALATIONS, GRADING TO BASE, GREY. LAMINAE, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.59	0.10	100		100% SANDSTONE,COARSE GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
41.04	0.45	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
41.35	0.31	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
45.87	4.52	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
45.94	0.07			100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON STICKY, MODERATE PERMIABILITY.
				NOTE: ROPOL MUD ADDED	
45.96	0.02	80		100% CLAY	GREY, HIGHLY WEATHERED, VERY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF MT. NICHOLAS MIDDLE 2 : 421.21 M R.L.	
46.12	0.16	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, SLIGHT PERMIABILITY.
46.17	0.05	100		100% CARBONACEOUS MUDSTONE	GREY, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
46.29	0.12	100		100% COAL, DULL	BLACK, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
46.36	0.07	100		100% MUDSTONE	CARBONACEOUS, GREY, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, EFFECTIVELY IMPERMIABLE.
46.42	0.06	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
46.52	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.56 M; SAMPLED THICKNESS= 0.00 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
47.52	1.00	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
48.00	0.48	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
48.74	0.74	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
48.96	0.22	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
49.38	0.42	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
49.89	0.51	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	BANDS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
51.90	2.01	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
52.70	0.80	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: COALY FRAGMENTS AND STREAKS	
55.57	2.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, NON STICKY, EFFECTIVELY IMPERMIABLE.
55.64	0.07	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
60.00	4.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
60.57	0.57	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, DARK GREY, UNWEATHERED, STRONG ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
62.16	1.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 6 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
62.29	0.13	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: INTERSECT AT 40 DEG	
62.75	0.46	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
62.87	0.12	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON STICKY, EFFECTIVELY IMPERMIABLE.
63.00	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, NON STICKY.
63.27	0.27	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON STICKY.
					NOTE: COAL FRAGMENTS AND STREAKS
63.65	0.38	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
63.80	0.15	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.15	0.35	100		99% SANDSTONE,MEDIUM GRAINED 1% MUDSTONE	GREY. LENSES, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.25	0.10	100	33T01	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
64.36	0.11	100	33T02	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
64.46	0.10	100	33T03	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
64.56	0.10	100	33T04	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
64.65	0.09	100	33T05	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
65.70	1.05	100		100% SANDSTONE,MEDIUM GRAINED	COALY, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
67.05	1.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
67.54	0.49	100		100% MUDSTONE	SANDSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., INFILLED WITH CALCITE.
					NOTE: IRREGULAR UPPER + LOWER CONTACTS
72.02	4.48	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
74.04	2.02	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED. MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
					NOTE: COAL FRAGMENTS + STREAKS
74.97	0.93	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.08	3.11	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
82.00	3.92	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
82.39	0.39	100		100% SANDSTONE	MED.-COARSE GRAINED, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
87.30	4.91	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
87.63	0.33	0		CORE LOSS	NOTE: 3 METERS OF CEMENT OVER THIS AREA DID NOT SET
93.50	5.87	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
93.70	0.20	100		100% SANDSTONE,FINE GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
94.07	0.37	100		60% MUDSTONE 30% SANDSTONE,COARSE GRAINED 10% COAL	INTERCALATIONS, GREY-BROWN. LENSES, INTERCALATIONS, GREY. LENSES, DULL COAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
94.74	0.67	100		85% SANDSTONE 15% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
					NOTE: SUB PARALLEL / 5CM DISPLACEMENT
96.61	1.87	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
97.72	1.11	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH PLANT REMAINS.
98.58	0.86	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH PLANT REMAINS.
99.47	0.89	100		95% SANDSTONE,COARSE GRAINED 5% MUDSTONE	MED.-COARSE GRAINED, INTERCALATIONS, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., WITH PLANT REMAINS.
100.83	1.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.92	1.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY STRONG ROCK, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
103.68	1.76	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
104.50	0.82	100		75% MUDSTONE 25% SILTSTONE	LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: BROKEN CORE 104.05-104.10 AND 104.34-104.36	
105.50	1.00	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: 80 DEG BETWEEN SHEARS	
105.78	0.28	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
105.91	0.13	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
106.12	0.21	100		100% MUDSTONE	SILTSTONE, GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH LOAD CASTS, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: PARALLEL ORIENTATION	
106.25	0.13	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
106.69	0.44	100		100% SILTSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
107.18	0.49	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, GREY-GREEN. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
107.51	0.33	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GRADING TO BASE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
107.73	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
107.98	0.25	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
108.03	0.05	100		80% MUDSTONE 20% SILTSTONE	INTERCALATIONS, GREY-BROWN. FINE GRAINED SANDSTONE, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
108.07	0.04	100		100% SILTSTONE	FINE GRAINED SANDSTONE, GRADING TO BASE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
109.95	1.88	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
110.10	0.15	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	MED.-FINE GRAINED, ILLITIC, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
112.11	2.01	100		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.54	1.43	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.65	0.11	100	33T06	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.76	0.11	100	33T07	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.87	0.11	100	33T08	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
113.98	0.11	100	33T09	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.09	0.11	100	33T10	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.64	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.69	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.70	0.01	100		100% MUDSTONE	LENSES, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.79	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.90	0.11	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	SILTSTONE, LAMINAE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.97	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.17	0.20	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.57	0.40	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	SILTSTONE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.60	0.03	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
115.71	0.11	100	33T11	90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.78	0.07	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.88	0.10	100	33T12	90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
115.89	0.01	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.01	0.12	100	33T13	90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.13	0.12	100	33T14	90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.19	0.06	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.23	0.04	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	SILTSTONE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.39	0.16	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH LOAD CASTS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.54	0.15	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, BROWN-BLACK. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.70	0.16	100		95% MUDSTONE 5% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. SILTSTONE, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.78	0.08	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	SILTSTONE, LAMINAE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH LOAD CASTS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
116.86	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: 30 DEG BETWEEN CLEAT	
				TOP OF MT. NICHOLAS LOWER 1 : 350.31 M R.L.	
116.91	0.05	100	33T15	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
116.93	0.02	100	33T15	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
117.00	0.07	100	33T15	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
				NOTE: 50 DEG BETWEEN CLEAT	
117.04	0.04	100	1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
117.13	0.09	100	1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.14	0.01	100	1	70% PYRITE 30% COAL, HEAVY DULL	LENSES, GREY-GREEN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
117.20	0.06	100	1	80% COAL, HEAVY DULL 20% CLAY	BLACK. LUSTROUS, BROWN. WITH CALCITE ON CLEAT AND PYRITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
117.25	0.05	100	2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT AND PYRITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
117.27	0.02	100	2	80% COAL, HEAVY DULL 20% CLAY	BLACK. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
117.31	0.04	100	2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
117.32	0.01	100	2	60% CLAY 40% COAL, HEAVY DULL	BANDS, BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
117.37	0.05	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
117.42	0.05	100	2	100% COAL, MID LUSTROUS	BLACK, WITH CALCITE ON CLEAT AND PYRITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY. NOTE: 50 DEG BETWEEN CLEAT
117.54	0.12	100	33T16	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY. NOTE: 65 DEG BETWEEN CLEAT
117.54	0.12	100	2	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.80	0.26	100	2	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
					NOTE: 117.65-.69 OVERDRILLED. 65 DEG BETWEEN CLEAT
117.80	0.26	100	2	%	VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
117.87	0.07	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
117.97	0.10	100	2	60% COAL, HEAVY DULL 30% CLAY 10% COAL, DULL	BRIGHT COAL, BANDS, BLACK. LENSES, STREAKS, BROWN. INTERCALATIONS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS. JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.10	0.13	100	2	95% COAL, DULL 5% CLAY	BLACK. LENSES, BROWN. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.12	0.02	100	2	100% COAL, HEAVY DULL	ARGILLACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
118.20	0.08	100	2	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.22	0.02	100	3	100% CLAY	BANDS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
118.23	0.01	100	3	85% COAL, BRIGHT 15% PYRITE	BLACK. LENSES, ARGILLACEOUS, GREY-GREEN. WITH PYRITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
118.27	0.04	100	3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.28	0.01	100	3	100% CLAY	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.31	0.03	100	3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
118.50	0.19	100	3	95% COAL, HEAVY DULL 5% COAL, BRIGHT	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.55	0.05	100	3	100% CLAY	COALY, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.60	0.05	100	3	95% COAL, HEAVY DULL 5% COAL, BRIGHT	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.62	0.02	100	3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.65	0.03	100	3	100% COAL	DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.66	0.01	100	3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON STICKY, SLIGHT PERMIABILITY.
118.75	0.09	100	3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
118.79	0.04	100	3	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
				NOTE: SHEAR PERPENDICULAR TO JOINT	
118.85	0.06	100	3	100% COAL, DULL WITH FEW BRIGHT BANDS	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.90	0.05	100	4	100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
118.92	0.02	100	4	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
118.95	0.03	100	4	100% MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
118.96	0.01	100	33T17	100% COAL, HEAVY DULL	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.05	0.09	100	33T17	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
119.09	0.04	100	4	100% COAL, MID LUSTROUS	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
119.16	0.07		4	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY.
119.17	0.01	100	4	60% MUDSTONE 40% COAL, DULL	LENSES, STREAKS, LIGHT BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, EFFECTIVELY IMPERMIABLE.
119.18	0.01	100	4	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
119.21	0.03	100	4	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.23	0.02	100	4	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.30	0.07	100	4	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.31	0.01	100	4	100% MUDSTONE	PELLETAL, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
119.32	0.01	100	4	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.34	0.02	100	4	80% COAL, DULL WITH FEW BRIGHT BANDS 20% MUDSTONE	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
119.35	0.01	100	4	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.87 M; SAMPLED THICKNESS= 2.87 M	
119.38	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, NON STICKY, SLIGHT PERMIABILITY.
119.58	0.20	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.17	0.59	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, NON STICKY, SLIGHT PERMIABILITY. NOTE: SOME CRUSHED ZONES DUE TO POOR DRILLING ACTION
120.18	0.01	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.22	0.04	100		95% SILTSTONE 5% MUDSTONE	CALCAREOUS, CREAM. LENSES, GREY-BROWN. UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.35	0.13	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.39	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.50	0.11	100	33T18	100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
120.60	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
120.82	0.22	70		100% MUDSTONE	ARGILLACEOUS, GREY, WITH NODULES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF MT. NICHOLAS LOWER 2 : 346.35 M R.L.	
120.86	0.06	100	5	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.01	0.13	100	33T19	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.03	0.02	100	5	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.18	0.15	100	5	100% COAL, MID LUSTROUS - DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.24	0.06	100	6	80% COAL, MID LUSTROUS - DULL 20% CARBONACEOUS SHALE	BLACK. STREAKS, PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
121.40	0.16	100	6	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY. NOTE: 75 DEG BETWEEN CLEAT
121.42	0.02	100	6	90% CARBONACEOUS SHALE 10% COAL	PELLETAL, BROWN. DULL COAL. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, EFFECTIVELY IMPERMIABLE.
121.44	0.02	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.46	0.02	100	6	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
121.50	0.04	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
121.55	0.05	100	6	98% COAL, DULL 2% MUDSTONE	BLACK. LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
121.59	0.04	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
121.62	0.03	100	6	98% COAL, INTERBANDED DULL AND BRIGHT 2% MUDSTONE	BLACK. LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
121.80	0.18	100	6	98% COAL, MID LUSTROUS 2% MUDSTONE	BLACK. LENSES, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.85	0.05	100	6	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.86	0.01	100	6	100% TONSTEIN	WHITE, WITH CRYSTALLINE KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, EFFECTIVELY IMPERMEABLE.
121.88	0.02	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.
121.89	0.01	100	6	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.94	0.05	100	6	100% TONSTEIN	WHITE, WITH CRYSTALLINE KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
122.01	0.07	100	6	95% COAL, MID LUSTROUS - DULL 5% CARBONACEOUS SHALE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.14	0.13	100	6	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.15	0.01	100	6	70% COAL, MID LUSTROUS - DULL 30% CARBONACEOUS SHALE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
122.17	0.02	100	7	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON STICKY, EFFECTIVELY IMPERMIABLE.
122.20	0.03	100	7	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
122.30	0.10	100	7	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.32	0.02	100	7	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.33	0.01	100	7	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.35	0.02	100	7	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.45	0.10	100	7	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	INTERCALATIONS, BLACK. BANDS, BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.51	0.06	100	7	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, SLIGHT PERMIABILITY.
122.53	0.02	100	7	70% COAL, DULL WITH FEW BRIGHT BANDS 30% CARBONACEOUS SHALE	INTERCALATIONS, BROWN-BLACK. LENSES, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON STICKY, SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.71 M; SAMPLED THICKNESS= 1.71 M	
122.57	0.04	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
122.59	0.02	100		100% SANDSTONE,FINE GRAINED	LENSES, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
122.75	0.16	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
122.87	0.12	100	33T20	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.00	0.13	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.16	0.16	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.26	0.10	100	33T21	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.30	0.04	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.42	0.12	100	33T22	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
123.45	0.03	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.56	0.11	100	33T23	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.77	0.21	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.88	0.11	100	33T24	95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, GREY. STREAKS, MUDSTONE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
123.99	0.11	100	33T25	100% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
124.10	0.11	100	33T26	100% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
124.20	0.10	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MED.-FINE GRAINED, LAMINAE, GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
124.25	0.05	100		70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS SHALE	MED.-FINE GRAINED, LAMINAE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
124.42	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
125.11	0.69	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
125.62	0.51	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
126.25	0.63	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, LAMINAE, GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
126.80	0.55	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
126.91	0.11	100	33T27	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
126.97	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
127.08	0.11	100	33T28	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
127.18	0.10	100	33T29	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
127.28	0.10	100	33T30	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
127.47	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
128.52	1.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
129.85	1.33	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
132.83	2.98	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
132.90	0.07	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

NOTE: FACE PULL

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	17.99 - 19.05 M	1.06 M
M2	0.00 M	45.96 - 46.52 M	0.56 M
L1	2.87 M	116.86 - 119.35 M	2.87 M
L2	1.71 M	120.82 - 122.53 M	1.71 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
33T01	64.15 - 64.25 M	0.10 M
33T02	64.25 - 64.36 M	0.11 M
33T03	64.36 - 64.46 M	0.10 M
33T04	64.46 - 64.56 M	0.10 M
33T05	64.56 - 64.65 M	0.09 M
33T06	113.54 - 113.65 M	0.11 M
33T07	113.65 - 113.76 M	0.11 M
33T08	113.76 - 113.87 M	0.11 M
33T09	113.87 - 113.98 M	0.11 M
33T10	113.98 - 114.09 M	0.11 M
33T11	115.60 - 115.71 M	0.11 M
33T12	115.78 - 115.88 M	0.10 M
33T13	115.89 - 116.01 M	0.12 M
33T14	116.01 - 116.13 M	0.12 M
33T15	116.86 - 117.00 M	0.14 M
1	117.00 - 117.20 M	0.20 M
2	117.20 - 117.42 M	0.22 M
33T16	117.42 - 117.54 M	0.12 M
2	117.42 - 117.54 M	0.12 M
2	117.54 - 118.20 M	0.92 M
3	118.20 - 118.85 M	0.65 M
4	118.85 - 118.95 M	0.10 M
33T17	118.95 - 119.05 M	0.10 M
4	119.05 - 119.35 M	0.30 M
33T18	120.39 - 120.50 M	0.11 M
5	120.82 - 120.88 M	0.06 M
33T19	120.88 - 121.01 M	0.13 M
5	121.01 - 121.18 M	0.17 M
6	121.18 - 122.15 M	0.97 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
7	122.15 - 122.53 M	0.38 M
33T20	122.75 - 122.87 M	0.12 M
33T21	123.16 - 123.26 M	0.10 M
33T22	123.30 - 123.42 M	0.12 M
33T23	123.45 - 123.56 M	0.11 M
33T24	123.77 - 123.88 M	0.11 M
33T25	123.88 - 123.99 M	0.11 M
33T26	123.99 - 124.10 M	0.11 M
33T27	126.80 - 126.91 M	0.11 M
33T28	126.97 - 127.08 M	0.11 M
33T29	127.08 - 127.18 M	0.10 M
33T30	127.18 - 127.28 M	0.10 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 34

HOLE TYPE	CORE
EASTING	591,234 M AM GRID
NORTHING	5,402,273 M AM GRID
ELEVATION	480.51 M
TOTAL DEPTH DRILLED	114.75 M
DRILLING STARTED	16/12/80
DRILLING TIME	16 DAYS
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

BOREHOLE : GY 34

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.00	4.00			100% DOLERITE	SCREE, ORANGE-BROWN, HIGH PERMIABILITY.
				*** CORE DESCRIPTION ***	
17.60	13.60	50		100% DOLERITE	SCREE, ORANGE-BROWN, HIGH PERMIABILITY.
17.76	0.16	50		100% MUDSTONE	BADLY BROKEN, GREY, HIGHLY WEATHERED, VERY WEAK ROCK, HIGH PERMIABILITY.
18.05	0.29	75		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, HIGH PERMIABILITY.
18.13	0.08	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, HIGH PERMIABILITY.
18.14	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, HIGH PERMIABILITY.
18.25	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY, MODERATELY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, HIGH PERMIABILITY.
18.54	0.29	50		100% COAL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, HIGH PERMIABILITY.
20.60	2.06	100		100% MUDSTONE	GREY, WITH TRACES OF CALCITE, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
				BASE OF WEATHERING	
20.75	0.15	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
20.86	0.11	100		100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
20.89	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
20.90	0.01	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
20.92	0.02	100		100% CLAY	COALY, STREAKS, GREY, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
21.05	0.13	100		100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
21.08	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
21.12	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
21.16	0.04	100		100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
21.18	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
21.21	0.03	100		100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
21.38	0.17	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
21.76	0.38	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
22.27	0.51	80		75% MUDSTONE 25% CLAY	COALY, STREAKS, GREY. FRAGMENTS, GREY. MODERATELY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
22.29	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
22.31	0.02	100		100% CARBONACEOUS MUDSTONE	GREY, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
22.37	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
22.45	0.08	100		100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH PYRITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
22.54	0.09	100		75% MUDSTONE 25% SILTSTONE	CARBONACEOUS, GREY. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
23.25	0.71	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CALCAREOUS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
24.34	1.09	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
24.39	0.05	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
24.73	0.34	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
24.75	0.02	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
24.82	0.07	100		75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
24.86	0.04	100		100% CARBONACEOUS MUDSTONE	FINE GRAINED SANDSTONE, BANDS, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
25.38	0.52	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
25.58	0.20	0		CORE LOSS	
25.72	0.14	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
26.11	0.39	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
26.43	0.32	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
				BASE OF WEATHERING	
26.46	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
26.78	0.32	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	COALY, FRAGMENTS, GREY. GREY. UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
26.92	0.14	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, WITH CONVOLUTED BEDDING, WITH LOAD CASTS, SLIGHT PERMIABILITY.
26.98	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
27.33	0.35	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	SILTSTONE, LENSES, GREY. FINE GRAINED SANDSTONE, LENSES, GREY. UNWEATHERED, WEAK ROCK, WITH DISTURBED BEDDING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
27.44	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
27.48	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
28.17	0.69	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
28.29	0.12	100		100% MUDSTONE	CALCAREOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
29.06	0.77	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, RAPID SLAKING, SLIGHT PERMIABILITY.
29.36	0.30	100	34A01	100% CARBONACEOUS MUDSTONE	GRADING TO, COALY, BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 451.15 M R.L.	
29.41	0.05	100	34A02	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
29.52	0.11	100	34A02	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
29.57	0.05	100	34A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
29.63	0.06	100	34A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
29.68	0.05	100	34A02	100% COAL, MID LUSTROUS	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
29.74	0.06	100	34A02	100% MUDSTONE	GREY, WITH CALCITE ON JOINTS, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
29.85	0.11	100	34A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
30.00	0.15	100	34A03	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
30.17	0.17	100	34A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
30.38	0.21	100	34A03	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
30.39	0.01	100	34A03	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
30.53	0.14	100	34A03	100% COAL, DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
30.54	0.01	100	34A03	100% MUDSTONE	DARK BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
31.13	0.59	100	34A04	100% COAL, DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
31.35	0.22	100	34A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
31.42	0.07	100	34A05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
31.45	0.03	100	34A05	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
31.46	0.01	100	34A05	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
31.49	0.03	100	34A05	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
31.50	0.01	100	34A05	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.14 M; SAMPLED THICKNESS= 2.14 M	
32.05	0.55	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, EFFECTIVELY IMPERMIABLE.
32.09	0.04	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, VERY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
32.24	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
32.26	0.02	100		100% CLAY	GREY, HIGHLY WEATHERED, VERY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
32.92	0.66	100		90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, SLOW SLAKING, EFFECTIVELY IMPERMIABLE.
32.97	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
33.09	0.12	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
34.42	1.33	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
34.51	0.09	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. BANDS, GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
34.71	0.20	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	GREY. GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
34.99	0.28	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LAMINAE, GREY. GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
37.59	2.60	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
38.04	0.45	100		100% SANDSTONE,MEDIUM GRAINED	LABILE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
				NOTE: COAL FRAGMENTS PRESENT	
38.15	0.11	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
38.33	0.18	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MUDSTONE, LUSTROUS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
38.34	0.01	100		100% COAL	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
38.60	0.26	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
38.70	0.10	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
39.29	0.59	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE. NOTE: COAL FRAGMENTS PRESENT
				TOP OF MT. NICHOLAS MIDDLE 3 : 441.22 M R.L.	
39.43	0.14	100		100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.44	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.55	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
39.58	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.59	0.01	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
39.61	0.02	100		100% TONSTEIN	BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.63	0.02	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.64	0.01	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
39.72	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.76	0.04	100		100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
39.83	0.07	100		100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.54 M; SAMPLED THICKNESS= 0.00 M	
39.87	0.04	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.23	0.36	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	SILTSTONE, LAMINAE, GREY. GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
40.42	0.19	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
40.65	0.23	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
41.25	0.60	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
41.50	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
41.75	0.25	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
42.75	1.00	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., EFFECTIVELY IMPERMIABLE.
42.85	0.10	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
42.97	0.12	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
46.21	3.24	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
46.32	0.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
50.69	4.37	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
51.03	0.34	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY. NOTE: COAL FRAGMENTS PRESENT
55.31	4.28	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
55.80	0.49	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, GREY, UNWEATHERED, STRONG ROCK, SLIGHT PERMIABILITY.
61.16	5.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
61.51	0.35	100		100% GRANULE CONGLOMERATE	GRADING TO, SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.63	0.12	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.71	0.08	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.80	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.95	0.15	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.98	0.03	100		100% CLAY	GREY-GREEN, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
62.07	0.09	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
62.10	0.03	100		100% CARBONACEOUS MUDSTONE	GREY-GREEN, MODERATELY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
62.18	0.08	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
67.87	5.69	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
68.00	0.13	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
70.59	2.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
70.87	0.28	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.60	0.73	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
71.80	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.29	2.49	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.57	0.28	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.98	0.41	100		100% SANDSTONE,FINE GRAINED	GRADING TO, MUDSTONE, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
75.70	0.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
75.97	0.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
77.18	1.21	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
77.37	0.19	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
81.63	4.26	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.06	0.43	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
82.32	0.26	100		100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.52	0.20	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
82.90	0.38	100		80% PEBBLE CONGLOMERATE 20% SANDSTONE,MEDIUM GRAINED	MUDSTONE, FRAGMENTS, GREY. COALY, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
					NOTE: JOINTS INTERSECTING AT 95 DEG
83.04	0.14	100		100% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
83.99	0.95	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH DISTURBED BEDDING, NON SLAKING, SLIGHT PERMIABILITY.
84.14	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
85.10	0.96	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
85.97	0.87	100		100% SHALE	GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
86.32	0.35	100		100% SANDSTONE,FINE GRAINED	SHALY, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
86.95	0.63	100		100% SHALE	GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., SLOW SLAKING, EFFECTIVELY IMPERMIABLE.
87.12	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
87.31	0.19	100		60% SHALE 40% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
87.99	0.68	100		80% MUDSTONE 10% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	LAMINAE, GREY. LAMINAE, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
88.13	0.14	100		100% MUDSTONE	GREY, WITH CALCITE ON JOINTS, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 36 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, EFFECTIVELY IMPERMIABLE.
88.17	0.04	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
88.28	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, WITH SLUMP STRUCTURES, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
				NOTE: SHEAR AND JOINTS PARALLEL	
88.45	0.17	100		100% SILTSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
88.71	0.26	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
88.84	0.13	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY-BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
89.95	1.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
90.15	0.20	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 6 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
90.66	0.51	100		70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 6 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
91.97	1.31	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 8 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
92.88	0.91	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 6 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
93.28	0.40	100		70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 4 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
94.04	0.76	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
94.23	0.19	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	ARKOSIC, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 8 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
94.95	0.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
95.19	0.24	100	34T01	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
95.99	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
96.68	0.69	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
96.77	0.09	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
97.07	0.30	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
97.18	0.11	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
99.24	2.06	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 8 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
99.39	0.15	100	34T02	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
99.75	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 8 DEG., EFFECTIVELY IMPERMIABLE.
100.21	0.46	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
100.49	0.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
100.79	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
				NOTE: JOINT PARALLEL TO LOCAL BEDDING , OPPOSITE DIP	
101.01	0.22	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
101.81	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
101.95	0.14	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
101.97	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 8 DEG., EFFECTIVELY IMPERMIABLE.
101.99	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., JOINTS DIP 90 DEG., OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE, EFFECTIVELY IMPERMIABLE.
102.01	0.02	100		100% MUDSTONE	BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
102.10	0.09	100		80% CARBONACEOUS MUDSTONE 15% COAL, HEAVY DULL 5% MUDSTONE	BROWN-BLACK. BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.22	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
102.39	0.17	100	34T03	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
102.51	0.12	100	34T04	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
102.55	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
102.59	0.04	100	34T05	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., EFFECTIVELY IMPERMIABLE.
102.69	0.10	100	34T05	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
102.76	0.07	100	34T05	75% CARBONACEOUS MUDSTONE 25% MUDSTONE	COALY, BROWN-BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
		TOP	6	MT. NICHOLAS LOWER 2 : 377.75 M R.L.	
102.80	0.04	100	6	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.84	0.04	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.93	0.09	100	6	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.95	0.02	100	6	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
102.96	0.01	100	6	95% COAL, DULL 5% MUDSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				NOTE: PENNY BAND	
103.03	0.07	100	6	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.06	0.03	100	6	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.07	0.01	100	6	95% COAL, MID LUSTROUS 5% MUDSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				NOTE: PENNY BAND	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.09	0.02	100	7	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.11	0.02	100	7	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.12	0.01	100	7	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.13	0.01	100	7	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.17	0.04	100	7	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
103.30	0.13	100	34T06	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.31	0.01	100	8	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.32	0.01	100	8	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.33	0.01	100	8	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.36	0.03	100	8	100% MUDSTONE	BRIGHT COAL, STREAKS, BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.38	0.02	100	8	95% COAL, MID LUSTROUS 5% MUDSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
				NOTE: PENNY BAND	
103.53	0.15	100	8	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.54	0.01	100	8	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.60	0.06	100	8	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.63	0.03	100	8	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.64	0.01	100	8	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.65	0.01	100	8	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.67	0.02	100	8	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.92	0.25	100	8	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
103.95	0.03	100	8	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
103.97	0.02	100	8	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.00	0.03	100	9	100% TONSTEIN	BRIGHT COAL, STREAKS, GREY-BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.04	0.04	100	9	90% COAL, DULL 5% COAL, BRIGHT 5% CARBONACEOUS MUDSTONE	BLACK. BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.08	0.04	100	9	100% TONSTEIN	BRIGHT COAL, STREAKS, GREY-BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.09	0.01	100	10	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.20	0.11	100	10	100% COAL, DULL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
				NOTE: PENNY BAND	
104.21	0.01	100	10	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.25	0.04	100	10	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.32	0.07	100	10	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.35	0.03	100	10	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
104.41	0.06	100	10	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.42	0.01	100	10	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.46	0.04	100	10	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BROWN, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.56	0.10	100	10	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.57	0.01	100	10	100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
104.69	0.12	100	11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.70	0.01	100	11	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.76	0.06	100	11	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.79	0.03	100	11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
104.81	0.02	100	11	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.05 M; SAMPLED THICKNESS= 2.05 M	
104.85	0.04	100	34T07	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
104.94	0.09	100	34T07	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
105.09	0.15	100	34T08	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
105.20	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.43	0.23	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
105.54	0.11	100	34T09	50% SANDSTONE,FINE GRAINED 50% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
105.57	0.03	100	34T09	75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
105.60	0.03	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
105.77	0.17	100	34T10	70% SANDSTONE,FINE GRAINED 30% MUDSTONE	INTERCALATIONS, GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
105.92	0.15	100	34T11	70% SANDSTONE,FINE GRAINED 30% MUDSTONE	INTERCALATIONS, GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
105.94	0.02	100		50% SANDSTONE,FINE GRAINED 50% SHALE	INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 4 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
105.98	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., EFFECTIVELY IMPERMIABLE.
106.00	0.02	100		80% SHALE 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. INTERCALATIONS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
106.09	0.09	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., EFFECTIVELY IMPERMIABLE.
106.15	0.06	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
106.28	0.13	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.53	0.25	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
106.65	0.12	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
107.82	1.17	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
108.06	0.24	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
109.60	1.54	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
109.80	0.20	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	GREY. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
110.21	0.41	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
111.75	1.54	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 17 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
114.75	3.00	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 8 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	2.14 M	29.36 - 31.50 M	2.14 M
M3	0.00 M	39.29 - 39.83 M	0.54 M
L2	2.05 M	102.76 - 104.81 M	2.05 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
34A01	29.06 - 29.36 M	0.30 M
34A02	29.36 - 29.74 M	0.38 M
34A03	29.74 - 30.54 M	0.80 M
34A04	30.54 - 31.13 M	0.59 M
34A05	31.13 - 31.50 M	0.37 M
34T01	94.95 - 95.19 M	0.24 M
34T02	99.24 - 99.39 M	0.15 M
34T03	102.22 - 102.39 M	0.17 M
34T04	102.39 - 102.51 M	0.12 M
34T05	102.55 - 102.76 M	0.21 M
6	102.76 - 103.07 M	0.31 M
7	103.07 - 103.17 M	0.10 M
34T06	103.17 - 103.30 M	0.13 M
8	103.30 - 103.97 M	0.67 M
9	103.97 - 104.08 M	0.11 M
10	104.08 - 104.57 M	0.49 M
11	104.57 - 104.81 M	0.24 M
34T07	104.81 - 104.94 M	0.13 M
34T08	104.94 - 105.09 M	0.15 M
34T09	105.43 - 105.57 M	0.14 M
34T10	105.60 - 105.77 M	0.17 M
34T11	105.77 - 105.92 M	0.15 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 35

HOLE TYPE	CORE
EASTING	591,705 M AM GRID
NORTHING	5,397,935 M AM GRID
ELEVATION	356.05 M
TOTAL DEPTH DRILLED	56.70 M
DRILLING STARTED	8/ 2/81
DRILLING TIME	11 DAYS
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

BOREHOLE : GY 35

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CHIP DESCRIPTION ***	
0.50	0.50	100		100% SOIL	ARGILLACEOUS, BLACK, WEATHERED TO SOIL, VERY SOFT, SLIGHT PERMIABILITY.
1.00	0.50	100		100% SOIL	ARGILLACEOUS, BROWN, WEATHERED TO SOIL, SOFT, SLIGHT PERMIABILITY.
				*** CORE DESCRIPTION ***	
38.00	37.00	50		100% DOLERITE	SCREE, GREY-GREEN, MODERATELY WEATHERED, EXTREMELY SRONG ROCK, SLIGHT PERMIABILITY.
47.40	9.40	50		100% DOLERITE	SCREE, GREY-GREEN, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
50.90	3.50	50		100% DOLERITE	SCREE, GREY-GREEN, MODERATELY WEATHERED, EXTREMELY SRONG ROCK, SLIGHT PERMIABILITY.
				NOTE: INTERMITTENT WATER LOSS , ROPOL MUD ADDED	
				*** CHIP DESCRIPTION ***	
51.50	0.60	85		80% CLAY 15% CARBONACEOUS MUDSTONE 5% CARBONACEOUS MUDSTONE	SCREE, YELLOW-GREY. BROWN-BLACK. COALY, BROWN-BLACK. HIGHLY WEATHERED, FIRM, VERY STICKY, SLIGHT PERMIABILITY.
				*** CORE DESCRIPTION ***	
53.04	1.54	80		90% DOLERITE 10% SANDSTONE,COARSE GRAINED	SCREE. MUDSTONE, COALY. HIGHLY WEATHERED, EXTREMELY SRONG ROCK, SLIGHT PERMIABILITY.
53.25	0.21	100		100% MUDSTONE	SCREE, CREAM, HIGHLY WEATHERED, SOFT, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATELY STICKY, SLIGHT PERMIABILITY.
53.33	0.08	100		100% MUDSTONE	SCREE, GREY-GREEN, HIGHLY WEATHERED, STIFF, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
53.96	0.63	50		100% CARBONACEOUS MUDSTONE	COALY, SCREE, BLACK, HIGHLY WEATHERED, STIFF, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
54.26	0.30	100		50% DOLERITE 50% CLAY	SCREE, GREY. SCREE, GREY-GREEN. HIGHLY WEATHERED, STIFF, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.88	0.62	70		75% CLAY 25% CARBONACEOUS MUDSTONE	SCREE, GREY-GREEN. SCREE, BROWN-BLACK. HIGHLY WEATHERED, STIFF, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
55.83	0.95	100		90% COAL 10% CLAY	ARGILLACEOUS, SCREE, BROWN-BLACK. SCREE, YELLOW-BROWN. HIGHLY WEATHERED, STIFF, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
56.34	0.51	100		100% CLAY	ARENACEOUS, SCREE, YELLOW-BROWN, HIGHLY WEATHERED, STIFF, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
56.51	0.17	100		80% CLAY 20% DOLERITE	ARENACEOUS, SCREE. SCREE, GREY. HIGHLY WEATHERED, STIFF, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
56.70	0.19	100		100% DOLERITE	SCREE, HIGHLY WEATHERED, EXTREMELY SRONG ROCK, SLIGHT PERMIABILITY.

*** FRAME H11***

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 36

HOLE TYPE	CORE
EASTING	590,318 M AM GRID
NORTHING	5,401,347 M AM GRID
ELEVATION	486.23 M
TOTAL DEPTH DRILLED	117.82 M
DRILLING STARTED	5/ 3/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00	100		100% SOIL	ARGILLACEOUS, BROWN, WEATHERED TO SOIL, SOFT, SLIGHT PERMIABILITY.
				*** CORE DESCRIPTION ***	
3.95	2.95	20		100% SANDSTONE,COARSE GRAINED	DOLERITIC, ARGILLACEOUS, BROWN, WEATHERED TO SOIL, STIFF, SLIGHT PERMIABILITY.
					NOTE: NQ CORE THEN REAMED FOR 4INCH ID CASING -LATER REMOVED
11.00	7.05	60		70% SANDSTONE,COARSE GRAINED 28% SANDSTONE,COARSE GRAINED 2% SANDSTONE,COARSE GRAINED	DOLERITIC, BROWN. SANDSTONE, ARGILLACEOUS, BUFF. COALY, BROWN-BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
11.10	0.10	100		60% SANDSTONE,COARSE GRAINED 40% SANDSTONE,COARSE GRAINED	COALY, BROWN-BLACK. ARGILLACEOUS, LIGHT BROWN. HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
11.23	0.13	100		100% SANDSTONE,COARSE GRAINED	SANDSTONE, BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
11.67	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, VARIAGATED COLOUR, HIGHLY WEATHERED, COMPACT, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
11.77	0.10	60		100% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
11.80	0.03	60		100% CLAYSTONE	WHITE, HIGHLY WEATHERED, VERY SOFT, MODERATELY STICKY, SLIGHT PERMIABILITY.
12.05	0.25	30		100% CARBONACEOUS MUDSTONE	ARGILLACEOUS, BADLY BROKEN, BLACK, HIGHLY WEATHERED, VERY SOFT, SLIGHT PERMIABILITY.
12.09	0.04	100		95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, PELLETAL, BROWN. SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
12.14	0.05	70		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, MODERATELY WEATHERED, SOFT, SLIGHT PERMIABILITY.
12.20	0.06	100		100% MUDSTONE	FOSSILIFERROUS, GREY, SLIGHTLY WEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
12.24	0.04	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, BROWN-BLACK, HIGHLY WEATHERED, FIRM, EFFECTIVELY IMPERMIABLE.
12.33	0.09	100		70% CARBONACEOUS MUDSTONE 30% COAL	COALY, GRADING TO, BROWN-BLACK. LENSES, BROWN-BLACK. MODERATELY WEATHERED, VERY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
12.34	0.01	100		100% MUDSTONE	BUFF, HIGHLY WEATHERED, VERY SOFT, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF MT. NICHOLAS MIDDLE 1 : 473.89 M R.L.			
12.52	0.18	100		95% COAL, DULL 5% MUDSTONE	INTERCALATIONS, BLACK. STREAKS, PELLETAL, BROWN. WITH CALCITE ON CLEAT, MODERATELY WEATHERED, THINLY LAMINATED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, SLIGHT PERMIABILITY.
12.53	0.01	100		100% MUDSTONE	BUFF, HIGHLY WEATHERED, VERY SOFT, EFFECTIVELY IMPERMIABLE.
12.80	0.27	100		100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, WITH CALCITE ON CLEAT, MODERATELY WEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
		BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.46 M; SAMPLED THICKNESS= 0.00 M			
12.83	0.03	100		50% MUDSTONE 50% COAL, BRIGHT WITH NUMEROUS DULL BANDS	INTERCALATIONS, LAMINAE, GREY. BLACK. MODERATELY WEATHERED, THINLY LAMINATED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
12.84	0.01	100		100% MUDSTONE	LENSES, LIGHT GREY, MODERATELY WEATHERED, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
13.06	0.22	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
13.11	0.05	100		100% MUDSTONE	LIGHT GREY, STIFF, NON STICKY, EFFECTIVELY IMPERMIABLE.
		BASE OF WEATHERING			
13.80	0.69	100		100% MUDSTONE	FOSSILIFERROUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, NON STICKY, EFFECTIVELY IMPERMIABLE.
13.95	0.15	100	36T01	100% MUDSTONE	FOSSILIFERROUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON STICKY, EFFECTIVELY IMPERMIABLE.
14.00	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
14.27	0.27	100		100% MUDSTONE	FOSSILIFERROUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
14.43	0.16	100	36T02	100% MUDSTONE	FOSSILIFERROUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
14.59	0.16	100	36T03	100% MUDSTONE	FOSSILIFERROUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
15.39	0.60	100		100% MUDSTONE	FOSSILIFERROUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH POOR SORTING, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
15.60	0.21	100		100% MUDSTONE	FOSSILIFERROUS, GREY, WITH LAMINAE OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH LOAD CASTS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
16.23	0.63	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
16.43	0.20	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	INTERCALATIONS, BROWN-BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.82	1.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH POOR SORTING, WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
17.97	0.15	100	36T04	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
18.66	0.69	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH POOR SORTING, WITH SLUMP STRUCTURES, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
18.80	0.14	100	36T05	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH POOR SORTING, WITH SLUMP STRUCTURES, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
18.93	0.13	100	36T06	100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
19.10	0.17	100		100% MUDSTONE	LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
19.14	0.04	100		70% MUDSTONE 30% MUDSTONE	INTERCALATIONS, GREY. ARGILLACEOUS, LIGHT GREY. UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
19.15	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				*** CHIP DESCRIPTION ***	
19.25	0.10	80		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION *** / *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.66	0.41	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, RAPID SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
					NOTE: PVC CASING AT CHANGE FROM HQ TO NQ
19.84	0.18	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
19.90	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
19.92	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
20.32	0.40	5		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
20.52	0.20	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
20.72	0.20	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
20.88	0.16	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
21.18	0.30	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, INTERCALATIONS, GREY. LAMINAE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
21.40	0.22	100		100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
21.45	0.05	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
21.50	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
22.13	0.63	100		85% SANDSTONE,FINE GRAINED 15% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.55	0.42	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	INTERCALATIONS, GRADING TO, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
23.59	1.04	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
23.75	0.16	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
24.62	0.87	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 6 DEG., WITH MUD PELLETS, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.34	0.72	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 6 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.36	0.02	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.59	0.23	100		100% MUDSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.60	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.90	0.30	100		95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
25.91	0.01	100		100% SHEAR/FAULT ZONE	UNWEATHERED, VERY WEAK ROCK, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
26.47	0.56	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
26.59	0.12	100	36T07	100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
26.72	0.13	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				TOP OF MT. NICHOLAS MIDDLE 2 : 459.51 M R.L.	
26.75	0.03	100	36A01	100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
26.81	0.06	100	36A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
26.83	0.02	100	36A01	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
26.85	0.02	100	36A01	90% TONSTEIN 10% COAL	WHITE. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
26.98	0.13	100	36T11	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.09	0.11	100	36A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.26	0.17	100	36A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.28	0.02	100	36A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.29	0.01	100	36A01	50% MUDSTONE 50% COAL, DULL	SILTY, BANDS, BROWN. BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.38	0.09	100	36A01	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.40	0.02	100	36A01	100% MUDSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.52	0.12	100	36A01	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.61	0.09	100	36A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 62 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
27.62	0.01	100	36A01	50% COAL, BRIGHT 50% COAL, DULL WITH FEW BRIGHT BANDS	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.64	0.02	100	36A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.67	0.03	100	36A01	50% COAL, BRIGHT 50% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.74	0.07	100	36A01	90% COAL, DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.88	0.14	100	36A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.89	0.01	100	36A01	80% MUDSTONE 20% COAL, HEAVY DULL	COALY, BROWN-BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
27.97	0.08	100	36A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
28.05	0.08	100	36A01	80% COAL, MID LUSTROUS 20% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
28.06	0.01	100	36A01	70% COAL, MID LUSTROUS 30% MUDSTONE	BLACK. BANDS, BLACK. UNWEATHERED, VERY WEAK ROCK, BEDS DIP 4 DEG., NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
				NOTE: PENNY BAND	
28.10	0.04	100	36A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
28.11	0.01	100	36A01	80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
28.18	0.07	100	36A01	50% CARBONACEOUS MUDSTONE 50% COAL, BRIGHT	GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
28.20	0.02	100	36A01	80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY, SLIGHT PERMIABILITY.
28.25	0.05	100	36A01	80% COAL, BRIGHT WITH FEW DULL BANDS 20% CARBONACEOUS MUDSTONE	BLACK. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.53 M; SAMPLED THICKNESS= 1.53 M	
28.39	0.14	100	36T08	100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
28.49	0.10	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
28.62	0.13	100	36T09	100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
28.64	0.02	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
29.15	0.51	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.28	0.13	100	36T10	100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.38	0.10	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.50	0.12	100		98% MUDSTONE 2% COAL	SILTY, GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.60	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
29.69	0.09	100		100% MUDSTONE	CARBONACEOUS, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.73	0.04	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, MODERATELY STICKY, EFFECTIVELY IMPERMIABLE.
31.17	1.44	100		70% SANDSTONE,COARSE GRAINED 20% SANDSTONE,FINE GRAINED 10% MUDSTONE	ARKOSIC, INTERCALATIONS, GREY. INTERCALATIONS, GREY. SILTY, LAMINAE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH TROUGH CROSS BEDDING, WITH CARBONACEOUS WISPS, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
32.44	1.27	100		100% SANDSTONE	MED.-COARSE GRAINED, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
38.29	5.85	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, ARGILLACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
39.36	1.07	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.58	1.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF MT. NICHOLAS MIDDLE 3 : 445.65 M R.L.	
40.79	0.21	100		100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.84	0.05	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.87	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.90	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.32 M; SAMPLED THICKNESS= 0.00 M	
40.96	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
40.98	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.01	0.03	100		75% CARBONACEOUS MUDSTONE 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
41.13	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
41.21	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
41.23	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
42.09	0.86	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: JOINTS MAINLY AT TOP OF UNIT	
43.20	1.11	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
44.73	1.53	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
44.87	0.14	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
47.60	2.73	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 12 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
56.32	8.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 8 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
59.03	2.71	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
61.47	2.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
61.70	0.23	100		60% SANDSTONE,MEDIUM GRAINED 40% COAL	ARKOSIC, INTERCALATIONS, GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE. NOTE: JOINTS PARALLEL STRIKE OPPOSITE DIP
63.28	1.58	100		100% SANDSTONE,COARSE GRAINED	LITHIC, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
63.75	0.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
63.87	0.12	100		100% SANDSTONE,COARSE GRAINED	LITHIC, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
63.98	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.02	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.16	0.14	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN. PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.36	0.20	100		100% COAL, HEAVY DULL	GRADING TO, DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.39	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.40	0.01	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
64.48	0.08	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
67.60	3.12	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
70.85	3.25	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
71.60	0.75	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
72.17	0.57	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
72.30	0.13	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
74.97	2.67	100		100% SANDSTONE	MED.-COARSE GRAINED, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
79.38	4.41	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
80.12	0.74	100		100% SANDSTONE	MED.-COARSE GRAINED, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
81.77	1.65	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
81.96	0.19	100		90% SANDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
82.19	0.23	100		85% MUDSTONE 15% SANDSTONE,COARSE GRAINED	GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
82.46	0.27	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF DALMAYNE B : 403.77 M R.L.	
82.76	0.30	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLUMP STRUCTURES, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
83.57	0.81	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.87	0.30	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY. SILTSTONE, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.20	0.33	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 27 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.22	0.02	100		90% MUDSTONE 10% CLAYSTONE	BROWN. PELLETAL, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.48	0.26	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.50	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.74	0.24	100		85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
84.76	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
85.00	0.24	100		95% MUDSTONE 5% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
85.28	0.28	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE. NOTE: SHEARS VARY FROM FLAT TO 70 DEG WITH VARIOUS ORIENTATIONS
85.32	0.04	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	INTERCALATIONS, BROWN-BLACK. SILTSTONE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
85.63	0.31	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.78	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
85.81	0.03	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
85.83	0.02	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
86.11	0.28	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
86.52	0.41	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	INTERCALATIONS, LAMINAE, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
87.21	0.69	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
87.52	0.31	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
88.36	0.84	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
89.04	0.68	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	INTERCALATIONS, LENSES, GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
89.23	0.19	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, STREAKS, GREY. INTERCALATIONS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.54	0.31	100		85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
89.66	0.12	100	36T12	85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
89.81	0.15	100	36T13	85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
89.84	0.03	100		85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				BASE OF DALMAYNE B : THICKNESS= 7.38 M; SAMPLED THICKNESS= 0.27 M	
89.97	0.13	100	36T14	85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
90.03	0.06	100		85% MUDSTONE 15% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. STREAKS, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
90.30	0.27	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
90.70	0.40	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, GREY. INTERCALATIONS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
91.18	0.42	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
91.53	0.35	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, LAMINAE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
92.20	0.67	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	INTERCALATIONS, LIGHT GREY. SILTSTONE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
94.35	2.15	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
94.38	0.03	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
95.90	1.52	100		100% SANDSTONE	MED.-FINE GRAINED, ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				NOTE: JOINTING	BLOCKED DRILL BIT
97.60	1.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 48 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
98.50	0.90	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 8 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
98.85	0.35	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	GREY. PELLETAL, LENSES, GREY. WITH LENSES OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
99.01	0.16	100		50% COAL, DULL 40% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LENSES, BLACK. LENSES, GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
99.30	0.29	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, GREY, WITH LENSES OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
99.92	0.62	100		60% MUDSTONE 40% SANDSTONE	PELLETAL, GREY. MED.-COARSE GRAINED, LITHIC, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES. JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE. NOTE: SLICKENSIDE DIRECTIONS VARY FROM PARALLEL TO MAX DIP TO 45 DEG FROM MAX DIP
100.79	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
100.85	0.06	100		70% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE 10% COAL	INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, GREY-BROWN. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
104.82	3.97	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
104.99	0.17	100	36T15	100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
105.13	0.14	100	36T16	100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
105.29	0.15	100	36T17	100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
105.44	0.15	100	36T18	100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.60	0.16	100	36T19	100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
				TOP OF MT. NICHOLAS LOWER 2 : 380.63 M R.L.	
105.62	0.02	100	36A02	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY STRONG ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
105.65	0.03	100	36A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
105.68	0.03	100	36A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
105.73	0.05	100	36A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
105.75	0.02	100	36A02	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
105.77	0.02	100	36A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
105.81	0.04	100	36A02	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
105.87	0.06	100	36A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
105.88	0.01	100	36A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.10	0.22	100	36A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.15	0.05	100	36A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.40	0.25	100	36A02	100% COAL, DULL	GRADING TO, MID LUSTROUS COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
106.51	0.11	100	36A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
106.52	0.01	100	36A02	50% TONSTEIN 50% COAL, DULL	WHITE. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.60	0.08	100	36A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
106.62	0.02	100	36A02	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
106.77	0.15	100	36A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
106.90	0.13	100	36A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
106.91	0.01	100	36A02	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
106.97	0.06	100	36A02	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
107.01	0.04	100	36A02	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, SLIGHT PERMIABILITY.
107.03	0.02	100	36A02	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
107.12	0.09	100	36A02	90% COAL, DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
107.15	0.03	100	36A02	95% COAL, DULL 5% MUDSTONE	BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
107.17	0.02	100	36A02	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.57 M; SAMPLED THICKNESS= 1.57 M					
107.20	0.03	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
107.28	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY, EFFECTIVELY IMPERMIABLE.
107.42	0.14	100	36T20	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE. NOTE: SHEAR EXTENDS INTO TOP 1 CM OF SAMPLE
				TOP OF DALMAYNE C : 378.81 M R.L.	
107.58	0.16	100	36T21	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
107.74	0.16	100	36T22	90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
107.89	0.15	100	36T23	85% MUDSTONE 15% SILTSTONE	INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
108.64	0.75	100		85% MUDSTONE 15% SILTSTONE	INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
108.79	0.15	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	SILTSTONE, INTERCALATIONS, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH TROUGH CROSS BEDDING, NON STICKY, EFFECTIVELY IMPERMIABLE.
109.25	0.46	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	SILTSTONE, INTERCALATIONS, GREY. SILTSTONE, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH TROUGH CROSS BEDDING, NON STICKY, EFFECTIVELY IMPERMIABLE.
109.39	0.14	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH TROUGH CROSS BEDDING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.52	0.13	100	36T24	90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
109.59	0.07	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
110.15	0.56	100		80% MUDSTONE 20% SILTSTONE	SILTSTONE, INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
110.30	0.15	100	36T25	80% MUDSTONE 20% SILTSTONE	SILTSTONE, INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
110.44	0.14	100		80% MUDSTONE 20% SILTSTONE	SILTSTONE, INTERCALATIONS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
BASE OF DALMAYNE C : THICKNESS= 3.02 M; SAMPLED THICKNESS= 0.75 M					
110.59	0.15	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	SILTSTONE, INTERCALATIONS, GREY. SILTSTONE, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON STICKY, EFFECTIVELY IMPERMIABLE.
111.65	1.06	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
111.81	0.16	100	36T26	100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.82	2.01	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, VERY WIDELY SPACED JOINTS, JOINTS DIP 58 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.85	0.03	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
113.89	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
114.49	0.60	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, STRONG ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
114.53	0.04	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.
117.82	3.29	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 13 DEG., WITH MUD PELLETS, WITH TROUGH CROSS BEDDING, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY, EFFECTIVELY IMPERMIABLE.

NOTE: BASE OF HOLE

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	12.34 - 12.80 M	0.46 M
M2	1.53 M	26.72 - 28.25 M	1.53 M
M3	0.00 M	40.58 - 40.90 M	0.32 M
DB	0.27 M	82.46 - 89.84 M	7.38 M
L2	1.57 M	105.60 - 107.17 M	1.57 M
DC	0.75 M	107.42 - 110.44 M	3.02 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
36T01	13.80 - 13.95 M	0.15 M
36T02	14.27 - 14.43 M	0.16 M
36T03	14.43 - 14.59 M	0.16 M
36T04	17.82 - 17.97 M	0.15 M
36T05	18.66 - 18.80 M	0.14 M
36T06	18.80 - 18.93 M	0.13 M
36T07	26.47 - 26.59 M	0.12 M
36A01	26.72 - 26.85 M	0.13 M
36T11	26.85 - 26.98 M	0.13 M
36A01	26.98 - 28.25 M	1.27 M
36T08	28.25 - 28.39 M	0.14 M
36T09	28.49 - 28.62 M	0.13 M
36T10	29.15 - 29.28 M	0.13 M
36T12	89.54 - 89.66 M	0.12 M
36T13	89.66 - 89.81 M	0.15 M
36T14	89.84 - 89.97 M	0.13 M
36T15	104.82 - 104.99 M	0.17 M
36T16	104.99 - 105.13 M	0.14 M
36T17	105.13 - 105.29 M	0.16 M
36T18	105.29 - 105.44 M	0.15 M
36T19	105.44 - 105.60 M	0.16 M
36A02	105.60 - 107.17 M	1.57 M
36T20	107.28 - 107.42 M	0.14 M
36T21	107.42 - 107.58 M	0.16 M
36T22	107.58 - 107.74 M	0.16 M
36T23	107.74 - 107.89 M	0.15 M
36T24	109.39 - 109.52 M	0.13 M
36T25	110.15 - 110.30 M	0.15 M
36T26	111.65 - 111.81 M	0.16 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 37

HOLE TYPE	CORE
EASTING	591,156 M AM GRID
NORTHING	5,401,522 M AM GRID
ELEVATION	527.45 M
TOTAL DEPTH DRILLED	43.29 M
DRILLING STARTED	20/ 3/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
43.29	43.29	30		100% DOLERITE	SCREE, HIGHLY WEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 38

HOLE TYPE	CORE
EASTING	591,191 M AM GRID
NORTHING	5,398,123 M AM GRID
ELEVATION	391.36 M
TOTAL DEPTH DRILLED	75.00 M
DRILLING STARTED	21/ 3/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
75.00	75.00	75		100% DOLERITE	SCREE, HIGHLY WEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 39

HOLE TYPE	CORE
EASTING	590,299 M AM GRID
NORTHING	5,400,516 M AM GRID
ELEVATION	590.46 M
TOTAL DEPTH DRILLED	225.85 M
DRILLING STARTED	1/ 4/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
6.90	6.90			100% DOLERITE	SCREE, HIGH PERMIABILITY.
7.39	0.49	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, WITH CROSS LAMINATION, WITH MUD PELLETS, SLIGHT PERMIABILITY.
7.58	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN-BLACK, HIGHLY WEATHERED, VERY WEAK ROCK, WITH MUD PELLETS.
7.71	0.13	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, BROWN, HIGHLY WEATHERED, WEAK ROCK.
7.90	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.
8.10	0.20	100		75% SANDSTONE 25% MUDSTONE	MED.-COARSE GRAINED, YELLOW-BROWN. PEBBLY, GREY. MODERATELY WEATHERED, WEAK ROCK, WITH MUD PELLETS.
8.42	0.32	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, MODERATELY WEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
8.96	0.54	100		75% SANDSTONE 25% CARBONACEOUS SHALE	MED.-COARSE GRAINED, GREY. LAMINAE, BLACK. SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
9.07	0.11	100		90% SANDSTONE,COARSE GRAINED 10% MUDSTONE	COALY, FRAGMENTS, GREY. PEBBLY, GREY. SLIGHTLY WEATHERED, WEAK ROCK.
9.22	0.15	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS.
9.27	0.05	100		100% SANDSTONE,FINE GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK, BEDS DIP 12 DEG.
9.42	0.15	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
9.52	0.10	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	GREY. PELLETAL, GREY. SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS.
9.76	0.24	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
9.85	0.09	10		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
11.43	1.58	10		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
11.50	0.07	10		100% SANDSTONE,COARSE GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
11.53	0.03	10		100% SANDSTONE,FINE GRAINED	LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
12.00	0.47	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				NOTE: END OF HQ COREING	
13.62	1.62	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
14.00	0.38	0		CORE LOSS	
14.31	0.31	90		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
15.13	0.82	0		CORE LOSS	
15.27	0.14	90		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
15.67	0.40	0		CORE LOSS	
16.96	1.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
17.07	0.11	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, WEAK ROCK.
17.10	0.03	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS SHALE	GREY. LAMINAE, BLACK. SLIGHTLY WEATHERED, WEAK ROCK.
17.13	0.03	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
17.17	0.04	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, WEAK ROCK.
17.20	0.03	100		100% SANDSTONE,MEDIUM GRAINED	GREY, SLIGHTLY WEATHERED, WEAK ROCK.
17.43	0.23	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
18.15	0.72	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL, DULL	GREY. LENSES, FRAGMENTS, BLACK. SLIGHTLY WEATHERED, WEAK ROCK, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS.
19.27	1.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, SLIGHTLY WEATHERED, WEAK ROCK.
20.08	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF WEATHERING	
20.74	0.66	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
21.32	0.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
21.68	0.36	0		CORE LOSS	
22.56	0.88	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.90	0.34	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
25.40	2.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
26.02	0.62	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	COALY, FRAGMENTS, GREY. PELLETAL, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
26.10	0.08	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	LAMINAE, DARK GREY. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
26.18	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
26.21	0.03	95		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, SLIGHT PERMIABILITY.
26.27	0.06	100		100% MUDSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
26.44	0.17	100		95% CARBONACEOUS MUDSTONE 5% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
26.48	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
27.41	0.93	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
27.87	0.46	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	LAMINAE, GREY. LAMINAE, DARK GREY. UNWEATHERED, WEAK ROCK, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
28.47	0.60	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	LAMINAE, GREY. LAMINAE, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
29.13	0.66	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLOW SLAKING, SLIGHT PERMIABILITY.
29.78	0.65	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLOW SLAKING, SLIGHT PERMIABILITY.
30.79	1.01	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.35	0.56	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GREY. DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
32.00	0.65	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
33.85	1.85	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
34.35	0.50	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
35.42	1.07	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY. INTERCALATIONS, SILTSTONE, DARK GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., SLIGHT PERMIABILITY.
36.96	1.54	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS SHALE	SILTSTONE, INTERCALATIONS, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
37.85	0.89	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
37.98	0.13	100		85% SANDSTONE,MEDIUM GRAINED 15% CARBONACEOUS SHALE	CALCAREOUS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
38.78	0.80	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS SHALE	COALY, FRAGMENTS, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
39.11	0.33	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
39.40	0.29	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	COALY, FRAGMENTS, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, BEDS DIP 6 DEG., SLIGHT PERMIABILITY.
39.71	0.31	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
40.03	0.32	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	COALY, FRAGMENTS, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, BEDS DIP 7 DEG., WITH MUD PELLETS, SLIGHT PERMIABILITY.
40.52	0.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
40.68	0.16	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
42.06	1.38	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.15	0.09	0		CORE LOSS	
43.30	1.15	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, SLIGHT PERMIABILITY.
43.52	0.22	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
44.54	1.02	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	COALY, FRAGMENTS, GREY. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
44.76	0.22	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	COALY, FRAGMENTS, GREY. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
47.48	2.72	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
47.64	0.16	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	COALY, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
48.30	0.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
48.39	0.09	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
48.86	0.47	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
49.12	0.26	100		95% MUDSTONE 5% COAL	MASSIVE, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
49.21	0.09	100		100% MUDSTONE	WHITE, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
49.25	0.04	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
49.61	0.36	100		100% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
49.89	0.28	100		100% MUDSTONE	COALY, FRAGMENTS, CREAM, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 18 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.98	0.09	100		75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.11	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.12	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.15	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.16	0.01	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.61	0.45	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
50.80	0.19	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
50.89	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
51.65	0.76	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, MASSIVE, SLIGHT PERMIABILITY.
52.20	0.55	100		60% MUDSTONE 20% SILTSTONE 20% SANDSTONE,FINE GRAINED	LIGHT GREY. LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS, SLIGHT PERMIABILITY.
52.79	0.59	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. SANDSTONE, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, SLIGHT PERMIABILITY.
53.37	0.58	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
53.57	0.20	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
53.77	0.20	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
53.92	0.15	100		100% CARBONACEOUS MUDSTONE	KAOLINITIC, PELLETAL, DARK GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
54.30	0.38	100		90% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	LAMINAE. BANDS. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.39	0.09	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BLACK. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
54.65	0.26	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
54.93	0.28	100		75% MUDSTONE 15% COAL 10% MUDSTONE	FRAGMENTS. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
54.95	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.93	0.98	100		75% MUDSTONE 15% COAL 10% MUDSTONE	CARBONACEOUS, BLACK. FRAGMENTS. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
56.24	0.31	100		75% CARBONACEOUS MUDSTONE 15% MUDSTONE 10% COAL	PELLETAL. FRAGMENTS. WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SLIGHT PERMIABILITY.
56.94	0.70	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, WITH CALCITE ON FRACTURES, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
56.97	0.03	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, SLIGHT PERMIABILITY.
57.07	0.10	100		100% SILTSTONE	CALCAREOUS, GREY, UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
58.00	0.93	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
58.08	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES, SLIGHT PERMIABILITY.
58.12	0.04	100		100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES, SLIGHT PERMIABILITY.
58.21	0.09	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	GREY. LAMINAE. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
58.38	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
58.47	0.09	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
58.48	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY, WITH PELLETS OF KAOLINITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
58.50	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
58.51	0.01	100		100% MUDSTONE	CALCAREOUS, WHITE, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
58.52	0.01	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
58.58	0.06	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
59.21	0.63	100		75% CARBONACEOUS MUDSTONE 25% SANDSTONE,FINE GRAINED	DARK GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
59.70	0.49	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
59.98	0.28	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY, SLIGHT PERMIABILITY.
60.15	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
60.16	0.01	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
60.26	0.10	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
60.42	0.16	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. PELLETAL. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
60.52	0.10	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
60.54	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
61.35	0.81	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
61.87	0.52	100		80% SANDSTONE,FINE GRAINED 15% MUDSTONE 5% COAL, BRIGHT	CARBONACEOUS, GREY. CARBONACEOUS, GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
61.96	0.09	100		75% MUDSTONE 25% SANDSTONE	CARBONACEOUS, CALCAREOUS, GREY. CARBONACEOUS, CALCAREOUS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
62.01	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, VERY STICKY, SLIGHT PERMIABILITY.
62.05	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.07	0.02	100		75% COAL, DULL 25% MUDSTONE	BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.27	0.20	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.30	0.03	100		75% COAL, DULL 25% MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.38	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.39	0.01	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.47	0.08	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
62.63	0.16	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
62.72	0.09	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
63.23	0.51	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, CARBONACEOUS, GREY. LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
63.54	0.31	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. LENSES, DARK GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
63.60	0.06	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, SLIGHT PERMIABILITY.
63.70	0.10	100		100% MUDSTONE	CALCAREOUS, GREEN-BROWN, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.01	0.31	100		100% MUDSTONE	GREEN-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
64.15	0.14	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
64.19	0.04	100		100% MUDSTONE	BADLY BROKEN, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
64.28	0.09	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
64.58	0.30	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
65.62	1.04	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
65.68	0.06	100		90% SANDSTONE,FINE GRAINED 10% COAL, BRIGHT	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
65.90	0.22	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	LIGHT GREY. COALY, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
65.99	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
66.49	0.50	100		90% MUDSTONE 10% SILTSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, SLIGHT PERMIABILITY.
67.10	0.61	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
67.37	0.27	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
68.10	0.73	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY. COALY, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
68.21	0.11	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
68.22	0.01	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.45	0.23	100		90% MUDSTONE 10% MUDSTONE	LIGHT BROWN. CARBONACEOUS. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
68.48	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
68.74	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
68.98	0.24	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLOW SLAKING, SLIGHT PERMIABILITY.
69.02	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
69.07	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
69.35	0.28	100		80% COAL, DULL 20% MUDSTONE	BLACK. CARBONACEOUS. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
				NOTE: TWO SETS OF JOINTS,SAME STRIKE;OPPOSITE DIP DIRECTION	
69.48	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
69.60	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
69.61	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
69.71	0.10	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
69.82	0.11	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	LIGHT BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
69.96	0.14	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
69.98	0.02	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
70.13	0.15	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.30	0.17	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
70.35	0.05	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
70.50	0.15	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, GREY. LENSES, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
70.63	0.13	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
70.82	0.19	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.20	0.38	100		70% MUDSTONE 30% MUDSTONE	GREY-BROWN. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.27	0.07	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.35	0.08	100		90% MUDSTONE 10% MUDSTONE	GREY-BROWN. CARBONACEOUS, LAMINAE, GREY. WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
71.62	0.27	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
71.64	0.02	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLOW SLAKING, SLIGHT PERMIABILITY.
71.79	0.15	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.86	0.07	100		70% MUDSTONE 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.89	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
71.90	0.01	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
71.99	0.09	100		95% MUDSTONE 5% MUDSTONE	CARBONACEOUS, GREY-BROWN. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.01	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
72.07	0.06	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
72.11	0.04	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
72.16	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
72.18	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
72.25	0.07	100		95% COAL, HEAVY DULL 5% TONSTEIN	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
72.27	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
72.42	0.15	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
72.46	0.04	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
72.51	0.05	100		95% COAL, DULL 5% MUDSTONE	LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
72.59	0.08	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 90 DEG., OPEN, NON-PLANAR DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
72.61	0.02	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
72.63	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
72.73	0.10	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
72.76	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
72.82	0.06	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
72.86	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.91	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
73.13	0.22	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
73.21	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
73.28	0.07	0		CORE LOSS	
73.32	0.04	100		50% MUDSTONE 50% MUDSTONE	BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
				NOTE: JUMPED A METER	
73.47	0.15	100	39T01	50% MUDSTONE 50% MUDSTONE	BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
73.62	0.15	100	39T02	50% MUDSTONE 50% MUDSTONE	BANDS, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
73.67	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
73.73	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
73.88	0.15	100	39T03	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
73.96	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
74.10	0.14	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING, SLIGHT PERMIABILITY.
74.20	0.10	100		90% MUDSTONE 10% COAL	CARBONACEOUS, DARK GREY. BANDS. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
74.24	0.04	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
74.28	0.04	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY. FRAGMENTS. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.86	0.58	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
75.19	0.33	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
75.35	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
75.84	0.49	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
75.95	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
76.18	0.23	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
76.57	0.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
76.69	0.12	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
76.79	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
77.06	0.27	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
77.55	0.49	100		75% SANDSTONE 25% MUDSTONE	MED.-FINE GRAINED, GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
77.84	0.29	100		95% MUDSTONE 5% SANDSTONE,FINE GRAINED	LAMINAE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
78.03	0.19	100		75% SANDSTONE 25% MUDSTONE	MED.-FINE GRAINED, GREY. CREAM. UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
78.16	0.13	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.20	1.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, TIGHT NON PLANAR, SLIGHT PERMIABILITY.
79.25	0.05	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
80.18	0.93	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY-BROWN. CARBONACEOUS, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.
80.22	0.04	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	PELLETAL. COALY, STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
80.31	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
80.42	0.11	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
81.00	0.58	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
81.43	0.43	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, SLOW SLAKING, SLIGHT PERMIABILITY.
82.36	0.93	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
82.40	0.04	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
82.43	0.03	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
82.47	0.04	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
82.55	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
82.61	0.06	100		100% MUDSTONE	CARBONACEOUS, LENSES, BROWN, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.63	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
82.64	0.01	100		100% MUDSTONE	CARBONACEOUS, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
82.69	0.05	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
83.07	0.38	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
83.16	0.09	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, GREY. COALY, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.22	0.06	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
84.64	1.42	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
85.39	0.75	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
85.65	0.26	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
85.98	0.33	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
86.07	0.09	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
86.18	0.11	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
86.23	0.05	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
86.29	0.06	100		100% SILTSTONE	CARBONACEOUS, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
86.75	0.46	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
87.16	0.41	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
87.30	0.14	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.33	0.03	100		100% MUDSTONE	CALCAREOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.69	0.36	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
88.28	0.59	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
88.63	0.35	0		CORE LOSS	
88.66	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
89.04	0.18	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
89.30	0.26	0		CORE LOSS	
89.33	0.03	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
89.44	0.11	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
90.03	0.59	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
90.05	0.02	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
90.18	0.13	100		60% MUDSTONE 30% MUDSTONE 10% KAOLINITE	CARBONACEOUS, GREY. LIGHT GREY. PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
90.42	0.24	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
90.57	0.15	100		90% MUDSTONE 10% KAOLINITE	COALY, LENSES, GREY. PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
90.65	0.08	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS, GREY. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
90.90	0.25	100		90% MUDSTONE 10% KAOLINITE	GREY. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, MODERATE PERMIABILITY.
91.06	0.16	100		80% MUDSTONE 15% MUDSTONE 5% COAL	PELLETAL, LIGHT BROWN. CARBONACEOUS, GREY. LENSES. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS.
91.11	0.05	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
91.19	0.08	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
91.39	0.20	100		60% MUDSTONE 35% MUDSTONE 5% COAL	PELLETAL, LIGHT BROWN. CARBONACEOUS, GREY. LENSES. UNWEATHERED, WEAK ROCK.
91.63	0.24	100		100% MUDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
91.65	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
91.89	0.24	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
92.38	0.49	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
92.42	0.04	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
92.82	0.40	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
92.96	0.14	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
93.14	0.18	100		95% MUDSTONE 5% COAL	GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
93.59	0.45	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
94.42	0.83	100		75% MUDSTONE 25% SILTSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
94.85	0.43	100		60% MUDSTONE 40% SILTSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				TOP OF MT. NICHOLAS UPPER 8 : 495.61 M R.L.	
95.03	0.18	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
95.06	0.03	100		60% MUDSTONE 40% MUDSTONE	CREAM. CARBONACEOUS, GREY. UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., MODERATELY STICKY.
95.22	0.16	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.37 M; SAMPLED THICKNESS= 0.00 M	
95.29	0.07	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
95.38	0.09	100		100% MUDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
95.47	0.09	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, CREAM, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
95.56	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
95.91	0.35	100		100% MUDSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
96.47	0.56	100		80% SILTSTONE 20% SANDSTONE	CARBONACEOUS, GREY. VERY FINE GRAINED, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED.
96.49	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	LENSES, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.90	0.41	100		95% MUDSTONE 5% COAL	CARBONACEOUS, STREAKS, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH DISTURBED BEDDING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
97.34	0.44	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
97.58	0.24	100		100% SILTSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
98.40	0.82	100		50% SILTSTONE 50% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. COALY, FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
100.28	1.88	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
100.41	0.13	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK.
100.98	0.57	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., MASSIVE.
101.36	0.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.44	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, WITH PLANT REMAINS.
104.30	2.86	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 9 DEG., MASSIVE.
104.35	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.03	1.68	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, EFFECTIVELY IMPERMIABLE.
106.11	0.08	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL, DULL	GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
106.31	0.20	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
106.57	0.26	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
107.33	0.76	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH NORMAL GRADED BEDDING, EFFECTIVELY IMPERMIABLE.
107.39	0.06	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
108.11	0.72	100		85% SANDSTONE,MEDIUM GRAINED 15% SANDSTONE	GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
108.39	0.28	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
108.49	0.10	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
109.00	0.51	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 7 DEG., WITH NORMAL GRADED BEDDING, EFFECTIVELY IMPERMIABLE.
109.59	0.59	100		100% SANDSTONE,MEDIUM GRAINED	GREY, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
109.63	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, SLIGHT PERMIABILITY.
109.78	0.15	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., WITH MUD PELLETS, WITH PLANT REMAINS, EFFECTIVELY IMPERMIABLE.
109.86	0.08	100		80% CARBONACEOUS MUDSTONE 20% COAL	INTERCALATIONS, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG., HIGH PERMIABILITY.
110.15	0.29	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 4 DEG., WITH MUD PELLETS, SLIGHT PERMIABILITY.
111.40	1.25	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
111.58	0.18	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
112.28	0.70	100		90% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 5% COAL	GREY. STREAKS, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CONVOLUTED BEDDING, WITH PLANT REMAINS.
115.28	3.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, HIGH PERMIABILITY.
115.40	0.12	100		60% COAL, HEAVY DULL 40% MUDSTONE	INTERCALATIONS, BLACK. LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG., HIGH PERMIABILITY.
116.02	0.62	100		75% SANDSTONE 20% MUDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. LENSES, DARK GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS, HIGH PERMIABILITY.
				NOTE: LARGE MUD PELLET/LENS NEAR BASE	
116.55	0.53	100		99% SANDSTONE,MEDIUM GRAINED 1% COAL	GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, WITH PLANT REMAINS, HIGH PERMIABILITY.
116.65	0.10	100		90% COAL, DULL WITH FEW BRIGHT BANDS 10% MUDSTONE	BLACK. LENSES, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, HIGH PERMIABILITY.
				NOTE: SHEARS AT BASE ONLY	
117.16	0.51	100		100% SANDSTONE,COARSE GRAINED	CONGLOMERATIC, LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS, HIGH PERMIABILITY.
117.49	0.33	100		100% SANDSTONE	MED.-COARSE GRAINED, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, HIGH PERMIABILITY.
117.87	0.38	100		100% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, HIGH PERMIABILITY.
119.20	1.33	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, SCREE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, HIGH PERMIABILITY.
119.50	0.30	100		95% SANDSTONE,COARSE GRAINED 5% COAL	INTERCALATIONS, GREY. LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, HIGH PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
					*** CORE DESCRIPTION ***
119.80	0.30	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, HIGH PERMIABILITY.
					NOTE: SLICKENSIDES 20 DEG FROM TRUE DIP
120.42	0.62	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 6 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, HIGH PERMIABILITY.
					NOTE: SAME STRIKE,OPPOSITE DIP DIRECTION
120.44	0.02	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, HIGH PERMIABILITY.
120.73	0.29	100		100% SANDSTONE	SILTY, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, HIGH PERMIABILITY.
121.42	0.69	100		70% MUDSTONE 30% MUDSTONE	SILTY, INTERCALATIONS, DARK GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, HIGH PERMIABILITY.
121.44	0.02	100		100% MUDSTONE	LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, HIGH PERMIABILITY.
121.64	0.20	100		60% MUDSTONE 40% SILTSTONE	GRADING TO, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH SLUMP STRUCTURES, WITH CROSS LAMINATION, HIGH PERMIABILITY.
122.49	0.85	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	SILTY, LIGHT GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 57 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, HIGH PERMIABILITY.
122.52	0.03	100		100% MUDSTONE	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
					NOTE: FAULTED CONTACT
122.62	0.10	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	SILTSTONE, GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 15 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 17 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
					NOTE: FAULTED CONTACT OPPOSITE DIP TO BEDDING

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.72	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 18 DEG.
122.85	0.13	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 18 DEG.
122.93	0.08	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	SILTSTONE, GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
123.69	0.76	100		60% MUDSTONE 20% SANDSTONE,FINE GRAINED 20% CLAYSTONE	INTERCALATIONS, LAMINAE, GREY. INTERCALATIONS, LIGHT GREY. INTERCALATIONS, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 37 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: JOINTS SAME STRIKE TO BEDDING BUT OPPOSITE DIP DIRECTION
123.97	0.28	100		60% MUDSTONE 40% CLAYSTONE	CARBONACEOUS, INTERCALATIONS, BROWN-BLACK. GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 14 DEG., WITH MUD PELLETS.
124.02	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.06	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
124.12	0.06	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
124.22	0.10	100		95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK. NOTE: SHEARED BASAL CONTACT
124.32	0.10	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
124.62	0.30	0		CORE LOSS	
124.84	0.22	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, SCREE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH NORMAL GRADED BEDDING, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
124.89	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH DISTURBED BEDDING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.90	0.01	100		90% COAL, DULL 10% MUDSTONE	BROWN-BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 12 DEG.
124.92	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.94	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 14 DEG.
125.02	0.08	100		95% MUDSTONE 5% COAL	ARGILLACEOUS, LIGHT BROWN. LENSES. WITH LENSES OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS MIDDLE 1 : 465.44 M R.L.	
125.19	0.17	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.20	0.01	100		75% MUDSTONE 25% COAL, DULL	ARGILLACEOUS, LIGHT BROWN. BLACK. UNWEATHERED, FIRM.
125.25	0.05	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BROWN-BLACK. BLACK. UNWEATHERED, VERY WEAK ROCK.
125.26	0.01	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, FIRM.
125.31	0.05	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
125.34	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.36	0.02	100		70% MUDSTONE 30% COAL, DULL	ARGILLACEOUS, LAMINAE, LIGHT BROWN. INTERCALATIONS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.50	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
125.52	0.02	100		80% COAL, DULL 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.53	0.01	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
125.65	0.12	100		97% COAL, DULL 3% MUDSTONE	INTERCALATIONS, BLACK. ARGILLACEOUS, LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

NOTE: LOWER CONTACT FAULTED BY TWO SIMILAR SHEARS WITH OPP DIPS

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.63 M; SAMPLED THICKNESS= 0.00 M	
126.00	0.35	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
126.40	0.40	100		80% MUDSTONE 20% SILTSTONE	ARGILLACEOUS, GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
126.51	0.11	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
127.69	1.18	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
127.90	0.21	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.25	0.35	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.48	0.23	100		60% SILTSTONE 40% MUDSTONE	BANDS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
128.99	0.51	100		80% SANDSTONE 20% MUDSTONE	VERY FINE GRAINED, CALCAREOUS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY STRONG ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
129.40	0.41	100		50% SANDSTONE 50% MUDSTONE	VERY FINE GRAINED. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., WITH SLUMP STRUCTURES, WITH CARBONACEOUS WISPS.
129.55	0.15	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.80	0.25	100		60% MUDSTONE 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
130.10	0.30	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
130.83	0.73	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.47	0.64	100		60% SILTSTONE 20% SANDSTONE 20% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
131.76	0.29	100		80% MUDSTONE 20% SILTSTONE	GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
131.90	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
132.05	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
132.16	0.11	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
132.39	0.23	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
132.41	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
132.47	0.06	100		100% MUDSTONE	BADLY BROKEN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
132.66	0.19	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
132.99	0.33	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
133.00	0.01	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING.
133.05	0.05	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
133.21	0.16	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
133.62	0.41	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
133.72	0.10	100		80% MUDSTONE 20% MUDSTONE	LIGHT GREY. COALY. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
133.93	0.21	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
134.05	0.12	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS.
134.17	0.12	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
134.36	0.19	100		50% SILTSTONE 50% MUDSTONE	BANDS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
135.37	1.01	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
135.47	0.10	100		70% SILTSTONE 30% SILTSTONE	CARBONACEOUS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
135.67	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
136.05	0.38	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
136.24	0.19	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
136.44	0.20	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
136.49	0.05	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
136.56	0.07	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
137.66	1.10	100		100% SILTSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
137.96	0.30	100		70% SILTSTONE 30% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
138.11	0.15	100	39T04	50% SILTSTONE 50% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
138.40	0.29	100		60% MUDSTONE 40% SILTSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
138.52	0.12	100	39T05	100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
138.68	0.16	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS.
				TOP OF MT. NICHOLAS MIDDLE 2 : 451.78 M R.L.	
138.80	0.12	100		100% COAL, DULL	MUDSTONE, BANDS, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
138.84	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
139.24	0.40	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
139.28	0.04	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
139.88	0.60	0		CORE LOSS	
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.20 M; SAMPLED THICKNESS= 0.00 M	
140.59	0.71	0		CORE LOSS	
140.79	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
142.28	1.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
143.33	1.05	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
145.85	2.52	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 8 DEG., MASSIVE.
145.94	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
146.41	0.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
146.87	0.46	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
147.84	0.97	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MASSIVE.
148.44	0.60	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 8 DEG., WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.20	0.76	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH NORMAL GRADED BEDDING.
150.70	1.50	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MASSIVE.
150.85	0.15	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MASSIVE.
151.28	0.43	100		100% SANDSTONE	VERY FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MASSIVE.
151.32	0.04	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 8 DEG.
156.66	5.34	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
156.74	0.08	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	FRAGMENTS, BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
157.06	0.32	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
157.28	0.22	100		50% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE 25% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
158.58	1.30	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
158.88	0.30	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
159.48	0.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
159.58	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
163.85	4.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
164.19	0.34	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
165.70	1.51	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
166.21	0.51	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
166.56	0.35	100		75% SANDSTONE 25% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
167.95	1.39	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
168.55	0.60	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 9 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
170.06	1.51	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
170.66	0.60	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
170.87	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
171.09	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
172.32	1.23	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
173.13	0.81	100		100% SANDSTONE	VERY COARSE GRAINED, LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
173.41	0.28	100		85% SANDSTONE 10% CARBONACEOUS MUDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
173.86	0.45	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
174.12	0.26	100		80% SANDSTONE 10% COAL 10% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. LENSES, BLACK. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
174.82	0.70	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
175.15	0.33	100		100% SANDSTONE,COARSE GRAINED	COARSE GRAINED, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
175.29	0.14	100		100% SANDSTONE,MEDIUM GRAINED	FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
175.47	0.18	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
176.79	1.32	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
177.40	0.61	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
177.69	0.29	100		75% SANDSTONE 20% SANDSTONE,COARSE GRAINED 5% COAL	GRANULAR, LIGHT GREY. LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.76	1.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
179.13	0.37	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
179.93	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
180.20	0.27	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
180.38	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
181.33	0.95	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
181.75	0.42	100		100% SANDSTONE,FINE GRAINED	COALY, LAMINAE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
184.74	2.99	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MASSIVE, EFFECTIVELY IMPERMIABLE.
184.89	0.15	100	39T06	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MASSIVE, EFFECTIVELY IMPERMIABLE.
185.07	0.18	100	39T07	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MASSIVE, EFFECTIVELY IMPERMIABLE.
185.14	0.07	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MASSIVE, EFFECTIVELY IMPERMIABLE.
186.09	0.95	100		100% COAL	UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
187.01	0.92	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
187.75	0.74	100		100% COAL	UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.14	0.39	100		100% SANDSTONE	MUDSTONE, DETRITAL, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
188.24	0.10	100		100% COAL	UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
188.35	0.11	100		100% SANDSTONE	COALY, FRAGMENTS, UNWEATHERED, MODERATELY WEAK ROCK, EFFECTIVELY IMPERMIABLE.
188.77	0.42	100		100% MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
199.48	10.71	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
199.54	0.06	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	CALCITIC, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
199.97	0.43	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
200.26	0.29	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG.
200.79	0.53	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
201.06	0.27	100		80% MUDSTONE 10% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	GREY. FRAGMENTS, COALY, BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
201.59	0.53	100		75% MUDSTONE 25% SILTSTONE	GREY. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
201.77	0.18	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
201.88	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.04	0.16	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GRADING TO, SILTSTONE, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
202.94	0.90	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	GRADING TO, SILTSTONE, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
203.76	0.82	100		75% MUDSTONE 15% SILTSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. COALY, STREAKS, GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
205.96	2.20	100		80% SANDSTONE,FINE GRAINED 15% SILTSTONE 5% CARBONACEOUS SHALE	GRADING TO, VERY FINE GRAINED, LIGHT GREY. GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH DISTURBED BEDDING.
206.99	1.03	100		90% MUDSTONE 10% SILTSTONE	CARBONACEOUS, LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
207.61	0.62	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
207.90	0.29	100		60% SANDSTONE 40% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, BLACK. MED.-FINE GRAINED, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
209.90	2.00	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
210.85	0.95	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
211.69	0.84	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
211.71	0.02	100		95% CARBONACEOUS MUDSTONE 5% SANDSTONE,FINE GRAINED	BANDS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
211.92	0.21	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
212.03	0.11	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.09	0.06	100		75% SANDSTONE 25% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
212.54	0.45	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
212.84	0.30	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	CARBONACEOUS, LAMINAE, LIGHT GREY. BANDS, LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
212.87	0.03	100		100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
213.17	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
213.42	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
213.57	0.15	100	39T11	100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
213.62	0.05	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	LAMINAE, COALY, BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
213.66	0.04	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
213.82	0.16	100	39T12	100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 1 : 376.64 M R.L.	
213.83	0.01	100	39A01	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
213.92	0.09	100	39A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
213.94	0.02	100	39A01	95% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
213.96	0.02	100	39A01	100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
214.01	0.05	100	39A01	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
214.02	0.01	100	39A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.03	0.01	100	39A01	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.06	0.03	100	39A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.07	0.01	100	39A01	50% COAL, DULL 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
214.17	0.10	100	39A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.25	0.08	100	39A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.26	0.01	100	39A01	95% COAL, MID LUSTROUS - DULL 5% COAL	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
214.47	0.21	100	39A01	100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
214.50	0.03	100	39A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.51	0.01	100	39A01	50% MUDSTONE 50% CARBONACEOUS MUDSTONE	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
214.55	0.04	100	39A01	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.59	0.04	100	39A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.60	0.01	100	39A01	50% COAL, DULL 50% MUDSTONE	BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
214.61	0.01	100	39A01	100% MUDSTONE	COALY, STREAKS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
214.76	0.15	100	39A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.80	0.04	100	39A01	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
214.83	0.03	100	39A01	100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
214.84	0.01	100	39A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.85	0.01	100	39A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.94	0.09	100	39A01	50% COAL, MID LUSTROUS 50% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
214.96	0.02	100	39A01	85% MUDSTONE 15% CARBONACEOUS MUDSTONE	WHITE. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.00	0.04	100	39A01	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.10	0.10	100	39A01	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
215.11	0.01	100	39A01	100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK.
215.12	0.01	100	39A01	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.37	0.25	100	39A01	50% COAL, MID LUSTROUS 50% CARBONACEOUS MUDSTONE	BLACK. LENSES, FRAGMENTS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
215.47	0.10	100	39A01	60% COAL, MID LUSTROUS 40% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.48	0.01	100	39A01	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, LENSES, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
215.54	0.06	100	39A01	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, BLACK, WITH PELLETS OF KAOLINITE, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.72 M; SAMPLED THICKNESS= 1.72 M	
215.57	0.03	100	39A02	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.64	0.07	100	30A02	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
215.98	0.34	100	39A02	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLOW SLAKING.
216.16	0.18	100	39A02	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
216.22	0.06	100	39A02	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				TOP OF MT. NICHOLAS LOWER 2 : 374.24 M R.L.	
216.24	0.02	100	39A03	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
216.48	0.24	100	39A03	80% COAL, DULL 20% COAL, HEAVY DULL	GRADING TO, MID LUSTROUS-DULL COAL, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
216.49	0.01	100	39A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
216.60	0.11	100	39A03	90% COAL, DULL 10% COAL, HEAVY DULL	BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
216.62	0.02	100	39A03	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
216.67	0.05	100	39A03	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
				*** CHIP DESCRIPTION ***	
216.74	0.07		39A03	100%	
				*** CORE DESCRIPTION ***	
216.97	0.23	100	39A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.01	0.04	100	39A03	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
217.24	0.23	100	39A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.28	0.04	100	39A03	100% COAL, HEAVY DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				*** CHIP DESCRIPTION ***	
217.34	0.06		39A03	100%	
				*** CORE DESCRIPTION ***	
217.36	0.02	100	39A03	100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
217.43	0.07	100	39A03	100% COAL, DULL	BADLY BROKEN, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
217.52	0.09	100	39A03	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
217.53	0.01	100	39A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
217.60	0.07	100	39A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
217.64	0.04	100	39A03	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
217.68	0.04	100	39A03	75% COAL, BRIGHT 25% COAL, MID LUSTROUS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				*** CHIP DESCRIPTION ***	
217.75	0.07		39A03	100%	
				*** CORE DESCRIPTION ***	
217.80	0.05	100	39A03	95% MUDSTONE 5% COAL, BRIGHT	GREY-BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
217.92	0.12	100	39A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.95	0.03	100	39A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH FRAGMENTS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK.
218.05	0.10	100	39A03	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
218.07	0.02	100	39A03	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
218.11	0.04	100	39A03	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
218.12	0.01	100	39A03	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.90 M; SAMPLED THICKNESS= 1.90 M	
218.26	0.14	100	39T14	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
218.29	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
218.46	0.17	100	39T15	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
219.83	1.37	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	GREY. GRADING TO, SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
220.06	0.23	100		80% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
220.50	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
220.69	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
220.98	0.29	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
221.54	0.56	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
223.60	2.06	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.15	0.55	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.95	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
225.01	0.06	100		95% SANDSTONE 5% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG.
225.55	0.54	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	94.85 - 95.22 M	0.37 M
M1	0.00 M	125.02 - 125.65 M	0.63 M
M2	0.00 M	138.68 - 139.88 M	1.20 M
L1	1.72 M	213.82 - 215.54 M	1.72 M
L2	1.90 M	216.22 - 218.12 M	1.90 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
39T01	73.32 - 73.47 M	0.15 M
39T02	73.47 - 73.62 M	0.15 M
39T03	73.73 - 73.88 M	0.15 M
39T04	137.96 - 138.11 M	0.15 M
39T05	138.40 - 138.52 M	0.12 M
39T06	184.74 - 184.89 M	0.15 M
39T07	184.89 - 185.07 M	0.18 M
39T11	213.42 - 213.57 M	0.15 M
39T12	213.66 - 213.82 M	0.16 M
39A01	213.82 - 215.54 M	1.72 M
39A02	215.54 - 215.57 M	0.03 M
30A02	215.57 - 215.64 M	0.07 M
39A02	215.64 - 216.22 M	0.58 M
39A03	216.22 - 218.12 M	1.90 M
39T14	218.12 - 218.26 M	0.14 M
39T15	218.29 - 218.46 M	0.17 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 40

HOLE TYPE	CORE
EASTING	590,299 M AM GRID
NORTHING	5,399,561 M AM GRID
ELEVATION	583.78 M
TOTAL DEPTH DRILLED	229.50 M
DRILLING STARTED	4/ 4/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

BOREHOLE : GY 40

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.00	31.00			100% DOLERITE	SCREE, MODERATE PERMIABILITY.
31.89	0.89	100		100% CARBONACEOUS MUDSTONE	BLACK, MODERATELY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
32.06	0.17	100		70% SILTSTONE 30% COAL	LIGHT GREY. BANDS. MODERATELY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
32.18	0.12	100		100% CARBONACEOUS MUDSTONE	MODERATELY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
32.50	0.32	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, LIGHT GREY. BANDS. MODERATELY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
33.17	0.67	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
33.35	0.18	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
34.00	0.65	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
34.16	0.16	100		75% SANDSTONE 15% MUDSTONE 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, LENSES, DARK GREY. CARBONACEOUS, PELLETAL, DARK GREY. SLIGHTLY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
34.66	0.50	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, GREY. SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
34.73	0.07	100		60% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE 20% MUDSTONE	LIGHT GREY. CARBONACEOUS, LENSES, GREY. PELLETAL, GREY. SLIGHTLY WEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
35.01	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, GREY, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
				BASE OF WEATHERING	
36.21	1.20	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
36.35	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH NORMAL GRADED BEDDING, SLIGHT PERMIABILITY.
36.83	0.48	100		100% SANDSTONE,MEDIUM GRAINED	MUDSTONE, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
36.89	0.06	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
37.23	0.34	100		90% SANDSTONE 10% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, LIGHT GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
37.50	0.27	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
38.80	1.30	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
40.70	1.90	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 9 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
41.00	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
42.29	1.29	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.31	0.02	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
42.89	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
42.97	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
43.13	0.16	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
43.19	0.06	100		100% CARBONACEOUS MUDSTONE	LENSES, CALCAREOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
44.20	1.01	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., SLIGHT PERMIABILITY.
44.55	0.35	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	COALY, STREAKS, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
45.40	0.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.50	0.10	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
46.50	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
49.50	3.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
49.94	0.44	100		60% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE 10% COAL, DULL	LIGHT GREY. FRAGMENTS. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
50.15	0.21	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
50.40	0.25	100		70% SANDSTONE,MEDIUM GRAINED 30% COAL, DULL	LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
50.55	0.15	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
50.60	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.22	0.62	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. CARBONACEOUS, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.35	0.13	100		70% SANDSTONE,MEDIUM GRAINED 30% COAL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.48	0.13	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.49	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.57	0.08	100		100% SILTSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
51.76	0.19	100		60% SANDSTONE,FINE GRAINED 30% MUDSTONE 10% COAL, DULL	LIGHT GREY. GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
53.55	1.79	100		100% SANDSTONE	MED.-FINE GRAINED, COALY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
53.88	0.33	100		90% SANDSTONE 5% MUDSTONE 5% COAL, DULL	MED.-FINE GRAINED, LIGHT GREY. PELLETAL. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
54.23	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
54.25	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
54.38	0.13	100		80% SANDSTONE 20% COAL, DULL WITH FEW BRIGHT BANDS	MED.-FINE GRAINED, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
54.40	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
54.53	0.13	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 6 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
54.59	0.06	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
54.74	0.15	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. LENSES, DARK GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
55.00	0.26	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.10	0.10	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	DARK GREY. LENSES, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.19	0.09	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
55.31	0.12	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
55.45	0.14	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
55.50	0.05	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.59	0.09	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
55.62	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.78	0.16	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.83	0.05	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
55.86	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
55.94	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
56.43	0.49	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
57.20	0.77	100		50% MUDSTONE 50% SILTSTONE	LIGHT GREY. GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
57.62	0.42	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
58.17	0.55	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
58.58	0.41	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
58.90	0.32	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
59.00	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
59.25	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
59.85	0.60	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
59.86	0.01	100		100% MUDSTONE	BADLY BROKEN, GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
60.00	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
60.07	0.07	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
60.54	0.47	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
61.50	0.96	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
62.47	0.97	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., MODERATE PERMIABILITY.
63.28	0.81	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
63.41	0.13	100		60% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE 10% COAL, DULL	LIGHT GREY. PELLETAL, GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., MODERATE PERMIABILITY.
65.85	2.44	100		80% SILTSTONE 10% MUDSTONE 10% MUDSTONE	LIGHT GREY. LAMINAE, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, MODERATE PERMIABILITY.
65.95	0.10	100		50% MUDSTONE 50% SILTSTONE	BADLY BROKEN, GREY. BADLY BROKEN, LIGHT GREY. UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
66.20	0.25	0		CORE LOSS	
66.69	0.49	100		75% MUDSTONE 25% SILTSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
67.38	0.69	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
70.10	2.72	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
70.38	0.28	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	CARBONACEOUS, LENSES, GREY. PELLETAL, BADLY BROKEN, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
71.06	0.68	100		60% MUDSTONE 40% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, SLIGHT PERMIABILITY.
				NOTE: DRILLER SPILT CORE 71.06-75.27 POSSIBLY OUT OF ORDER	
71.09	0.03	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
71.56	0.47	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, SLIGHT PERMIABILITY.
71.72	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
71.77	0.05	100		100% MUDSTONE	LAMINAE, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, SLIGHT PERMIABILITY.
72.05	0.28	100		75% SILTSTONE 25% MUDSTONE	DARK GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
72.27	0.22	100		75% SILTSTONE 25% MUDSTONE	DARK GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
73.67	1.40	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
74.21	0.54	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
74.87	0.66	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS SHALE	COALY, FRAGMENTS, LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.96	0.09	100		80% CARBONACEOUS MUDSTONE 20% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
75.26	0.30	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATELY STICKY, SLIGHT PERMIABILITY.
75.55	0.29	100		80% CARBONACEOUS MUDSTONE 10% MUDSTONE 10% COAL, BRIGHT	BLACK. LAMINAE, DARK GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
75.75	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
76.00	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 29 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
76.29	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
77.04	0.75	100		75% MUDSTONE 25% SILTSTONE	MASSIVE, GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
77.37	0.33	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
77.92	0.55	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., WITH CROSS LAMINATION, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
77.95	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
77.96	0.01	100	40T01	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATE PERMIABILITY.
78.06	0.10	100	40T01	75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATE PERMIABILITY.
78.09	0.03	100	40T01	90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.25	0.16	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, MODERATE PERMIABILITY.
78.39	0.14	100	40T02	90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
78.57	0.18	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY. NOTE: SAMPLE 40T03 BROKE IN ALFOIL ABANDONED AND RETURNED TO TRAY
78.83	0.26	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
78.88	0.05	100	40T04	60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
78.96	0.08	100	40T04	90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
79.10	0.14	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
79.14	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, CREAM, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
79.20	0.06	100		75% CARBONACEOUS MUDSTONE 20% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. BLACK. PELLETAL, BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
79.29	0.09	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	COALY, STREAKS, BLACK. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
79.55	0.26	100		100% MUDSTONE	CARBONACEOUS, BANDS, CREAM, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, MODERATE PERMIABILITY.
79.70	0.15	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
79.75	0.05	100		60% MUDSTONE 40% MUDSTONE	GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.04	0.29	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, NON-PLANAR DISCONTINUITIES, MODERATE PERMIABILITY.
80.09	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
80.30	0.21	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.38	0.08	100		90% MUDSTONE 5% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, STREAKS, LIGHT BROWN. FRAGMENTS, BROWN-BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.40	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.51	0.11	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.57	0.06	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.58	0.01	100		100% COAL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
80.67	0.09	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
80.93	0.26	100		75% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED 5% MUDSTONE	BLACK. BANDS, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
81.09	0.16	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
81.38	0.29	100		100% MUDSTONE	COARSE GRAINED, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.05	0.67	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, MODERATE PERMIABILITY.
82.25	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
82.31	0.06	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CALCITIC, LENSES, GREY. FRAGMENTS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.17	0.86	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CALCAREOUS, WHITE. COALY, STREAKS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, MODERATE PERMIABILITY.
83.27	0.10	100		60% COAL, DULL 40% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.31	0.04	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	GREY-BROWN. PEBBLY, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.35	0.04	100		95% MUDSTONE 5% MUDSTONE	CARBONACEOUS, GREY. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.37	0.02	100		75% MUDSTONE 25% MUDSTONE	GREY. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.39	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.41	0.02	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
83.45	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
83.50	0.05	100		75% CARBONACEOUS MUDSTONE 25% COAL, DULL	BROWN-BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
83.67	0.17	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
83.68	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, LAMINATED, MODERATELY STICKY, MODERATE PERMIABILITY.
83.78	0.10	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LENSES, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.84	0.06	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS, WITH MUD PELLETS, MODERATE PERMIABILITY.
83.88	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
83.93	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
83.95	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
84.00	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
84.06	0.06	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, LAMINATED, MODERATE PERMIABILITY.
84.09	0.03	100		70% MUDSTONE 30% MUDSTONE	INTERCALATIONS, LIGHT GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
84.18	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY. NOTE: STRIKE PERPENDICULAR BETWEEN JOINTS
84.22	0.04	100		70% MUDSTONE 30% MUDSTONE	PELLETAL, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
84.35	0.13	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
84.42	0.07	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
84.47	0.05	100		80% MUDSTONE 20% MUDSTONE	LAMINAE, LIGHT BROWN. GREY. UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
84.53	0.06	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
84.57	0.04	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATE PERMIABILITY.
84.59	0.02	100		100% MUDSTONE	PELLETAL, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.67	0.08	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
84.77	0.10	100		80% MUDSTONE 20% MUDSTONE	CREAM. PELLETAL, CREAM. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG., WITH TROUGH CROSS BEDDING, MODERATE PERMIABILITY.
84.86	0.09	100		80% COAL, HEAVY DULL 20% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
85.68	0.82	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, MODERATE PERMIABILITY.
85.98	0.30	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	INTERCALATIONS, DARK GREY. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
86.09	0.11	100	40T05	60% CARBONACEOUS MUDSTONE 40% MUDSTONE	INTERCALATIONS, DARK GREY. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
86.12	0.03	100	40T05	60% MUDSTONE 30% CARBONACEOUS MUDSTONE 10% MUDSTONE	LIGHT BROWN. DARK GREY. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
86.21	0.09	100	40T06	60% MUDSTONE 30% CARBONACEOUS MUDSTONE 10% MUDSTONE	LIGHT BROWN. DARK GREY. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
86.27	0.06	100	40T06	80% COAL, DULL 20% MUDSTONE	BLACK. PELLETAL, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
86.31	0.04	100		80% COAL, DULL 20% MUDSTONE	BLACK. PELLETAL, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
86.43	0.12	100		80% MUDSTONE 20% MUDSTONE	LIGHT GREY. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
86.71	0.28	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY STRONG ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
86.82	0.11	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, LAMINAE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.15	0.33	100		100% COAL, HEAVY DULL	MUDSTONE, LAMINAE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
87.18	0.03	100		95% MUDSTONE 5% COAL, DULL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.47	0.29	100		80% COAL, HEAVY DULL 20% MUDSTONE	BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.54	0.07	100	40T07	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
87.62	0.08	100	40T07	100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, MODERATE PERMIABILITY.
87.68	0.06	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, MODERATE PERMIABILITY.
87.84	0.16	100	40T08	100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, MODERATE PERMIABILITY.
87.95	0.11	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, MODERATE PERMIABILITY.
87.98	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
88.00	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
88.32	0.32	100		100% COAL, DULL	MUDSTONE, PELLETAL, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
88.74	0.42	100		100% SILTSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
88.87	0.13	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., LAMINATED, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.19	0.32	100		95% SILTSTONE 5% COAL, DULL	CARBONACEOUS, DARK GREY. LENSES, BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
90.20	1.01	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, MODERATE PERMIABILITY.
90.32	0.12	100		100% MUDSTONE	LAMINAE, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
90.48	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
90.57	0.09	100		100% MUDSTONE	LAMINAE, LIGHT BROWN, UNWEATHERED, WEAK ROCK, LAMINATED, MODERATE PERMIABILITY.
90.81	0.24	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
91.25	0.44	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
91.50	0.25	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
91.80	0.30	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
91.89	0.09	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
91.99	0.10	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
92.15	0.16	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	CARBONACEOUS, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
92.50	0.35	100		100% COAL, HEAVY DULL	MUDSTONE, BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
92.65	0.15	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
92.91	0.26	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
93.17	0.26	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
93.38	0.21	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
93.68	0.30	100		60% MUDSTONE 40% MUDSTONE	INTERCALATIONS, GREY. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
93.78	0.10	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
93.91	0.13	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
93.97	0.06	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY-BROWN. INTERCALATIONS. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.15	0.18	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
94.20	0.05	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	INTERCALATIONS. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.31	0.11	100		100% COAL, DULL	MUDSTONE, BANDS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
94.43	0.12	100		70% MUDSTONE 30% MUDSTONE	CREAM. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.51	0.08	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.54	0.03	100		100% MUDSTONE	CARBONACEOUS, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
94.64	0.10	100		95% COAL, DULL 5% MUDSTONE	STREAKS, LENSES. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
94.68	0.04	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
94.73	0.05	100		95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.75	0.02	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.80	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.86	0.06	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
94.90	0.04	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	GREY-BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
94.95	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
94.97	0.02	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.00	0.03	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.12	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.19	0.07	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
95.24	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.29	0.05	100		100% MUDSTONE	COALY, LENSES, GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.33	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.36	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
95.44	0.08	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, MODERATE PERMIABILITY.
95.72	0.28	100		95% COAL, DULL 5% MUDSTONE	INTERCALATIONS, BLACK. STREAKS, LAMINAE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
96.03	0.31	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
96.17	0.14	100		70% MUDSTONE 30% MUDSTONE	LAMINAE, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., MODERATE PERMIABILITY.
96.40	0.23	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
				NOTE: TWO SETS	OF JOINTS,SAME STRIKE OPPOSITE DIP DIRECTION
96.47	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
96.58	0.11	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATE PERMIABILITY.
97.50	0.92	100		99% MUDSTONE 1% COAL	LIGHT GREY. LENSES, FRAGMENTS, BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
97.58	0.08	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
97.71	0.13	100	40T09	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
97.84	0.13	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, MODERATE PERMIABILITY.
97.87	0.03	100	40T10	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
98.00	0.13	100	40T11	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
99.61	1.61	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
99.73	0.12	100		100% MUDSTONE	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, MODERATE PERMIABILITY.
101.52	1.79	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CONVOLUTED BEDDING, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
103.00	1.48	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.14	0.14	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	INTERCALATIONS, LIGHT GREY. ARGILLACEOUS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, MODERATE PERMIABILITY.
103.84	0.70	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
103.93	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
103.94	0.01	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
104.38	0.44	100		95% MUDSTONE 5% COAL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY. NOTE: SHEAR DIRECTIONS VARY
104.42	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATE PERMIABILITY.
104.69	0.27	100		90% MUDSTONE 7% MUDSTONE 3% COAL	ARGILLACEOUS, CREAM. CALCAREOUS, LENSES, WHITE. LENSES. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, MODERATELY STICKY, MODERATE PERMIABILITY.
104.78	0.09	100		100% MUDSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
104.90	0.12	100		100% MUDSTONE	ARGILLACEOUS, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
105.07	0.17	100		100% MUDSTONE	CARBONACEOUS, ARGILLACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
				TOP OF MT. NICHOLAS UPPER 8 : 478.71 M R.L.	
105.30	0.23	100		70% COAL, DULL 20% MUDSTONE 10% CARBONACEOUS MUDSTONE	LENSES, GREY-BROWN. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS, MODERATE PERMIABILITY.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.23 M; SAMPLED THICKNESS= 0.00 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.42	0.12	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLUMP STRUCTURES, WITH PLANT REMAINS, MODERATE PERMIABILITY.
106.21	0.79	100		60% SILTSTONE 40% MUDSTONE	ARGILLACEOUS, LIGHT GREY. SILTY, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
106.53	0.32	100		100% MUDSTONE	ARGILLACEOUS, GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
106.55	0.02	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
106.62	0.07	100		90% COAL, DULL 10% MUDSTONE	STREAKS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
106.68	0.06	100		100% CLAYSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATE PERMIABILITY.
106.87	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
107.21	0.34	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, MODERATE PERMIABILITY.
108.22	1.01	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH BURROWING, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
108.49	0.27	100		100% CLAYSTONE	FOSSILIFERROUS, GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH BURROWING, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
108.62	0.13	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, WEAK ROCK, WITH BURROWING, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
109.38	0.66	100		100% MUDSTONE	SILTY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
109.47	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
109.55	0.08	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
109.78	0.23	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.81	0.03	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
109.83	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
110.20	0.37	100		95% CLAYSTONE 5% CLAYSTONE	INTERCALATIONS, LIGHT GREY. CARBONACEOUS, LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH DISTURBED BEDDING, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
110.35	0.15	100		80% CLAYSTONE 20% CLAYSTONE	CARBONACEOUS, DARK GREY. LAMINAE, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
110.37	0.02	100		100% CLAYSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
110.44	0.07	100		50% MUDSTONE 50% MUDSTONE	GREY-BROWN. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., LAMINATED, MODERATE PERMIABILITY.
110.74	0.30	100		60% MUDSTONE 40% CLAYSTONE	CARBONACEOUS, BROWN-BLACK. LAMINAE, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, MODERATE PERMIABILITY.
111.24	0.50	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
111.28	0.04	100		100% MUDSTONE	CALCAREOUS, LAMINAE, WHITE, UNWEATHERED, MODERATELY STRONG ROCK, MODERATE PERMIABILITY.
113.86	2.58	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
113.95	0.09	100		50% MUDSTONE 50% MUDSTONE	COALY, LENSES, GREY. PELLETAL, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, MODERATE PERMIABILITY.
114.00	0.05	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
114.09	0.09	100		70% COAL, HEAVY DULL 30% SILTSTONE	INTERCALATIONS. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
114.30	0.21	100		50% SILTSTONE 50% MUDSTONE	INTERCALATIONS, LIGHT GREY. CARBONACEOUS, GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
114.37	0.07	100		60% MUDSTONE 40% MUDSTONE	PELLETAL, GREY-GREEN. PELLETAL, KAOLINITIC, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
114.70	0.33	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING.
115.01	0.31	100		60% MUDSTONE 30% MUDSTONE 10% MUDSTONE	CARBONACEOUS, GREY. PELLETAL, GREY-GREEN. PELLETAL, KAOLINITIC, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
115.11	0.10	100		60% MUDSTONE 30% MUDSTONE 10% MUDSTONE	PELLETAL, GREY. GREY-BROWN. PELLETAL, KAOLINITIC, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
115.14	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.20	0.06	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
115.34	0.14	100		60% MUDSTONE 40% COAL, DULL	INTERCALATIONS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
115.60	0.26	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH CARBONACEOUS WISPS.
115.64	0.04	100		60% MUDSTONE 40% COAL, DULL	COALY, STREAKS, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
115.69	0.05	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING.
116.37	0.68	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION.
116.53	0.16	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
117.10	0.57	100		50% SANDSTONE 50% SILTSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
117.36	0.26	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
118.54	1.18	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
118.67	0.13	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.00	0.33	100		60% SILTSTONE 40% MUDSTONE	BANDS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
119.40	0.40	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG.
				TOP OF MT. NICHOLAS MIDDLE 1 : 464.38 M R.L.	
119.57	0.17	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
119.59	0.02	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATELY STICKY.
119.70	0.11	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
119.74	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
119.82	0.08	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
119.89	0.07	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.49 M; SAMPLED THICKNESS= 0.00 M	
119.94	0.05	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
120.01	0.07	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, WITH MUD PELLETS.
120.14	0.13	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.18	0.04	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.35	0.17	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.59	0.24	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, GREY. PELLETAL, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
120.71	0.12	100		70% MUDSTONE 25% MUDSTONE 5% COAL, DULL	CARBONACEOUS, GREY. PELLETAL, BANDS, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
120.77	0.06	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.80	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.84	0.04	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, MODERATELY STICKY.
121.53	0.69	100		100% MUDSTONE	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
121.66	0.13	100		70% SILTSTONE 30% MUDSTONE	LIGHT GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
121.90	0.24	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, DARK GREY. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
122.42	0.52	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.49	0.07	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. COALY, LENSES, GREY. UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
124.78	2.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MASSIVE, MODERATE PERMIABILITY.
125.17	0.39	100		80% SANDSTONE 20% COAL, DULL	MED.-FINE GRAINED, LIGHT GREY. LENSES. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
126.22	1.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MASSIVE, MODERATE PERMIABILITY.
126.30	0.08	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
127.41	1.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
127.43	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
127.51	0.08	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
128.60	1.09	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
129.02	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
129.76	0.74	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
130.05	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
130.96	0.91	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., MODERATE PERMIABILITY.
131.63	0.67	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.71	0.08	100		95% COAL, DULL 5% MUDSTONE	CARBONACEOUS, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
131.81	0.10	100		100% SANDSTONE,FINE GRAINED	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
132.30	0.49	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
133.30	1.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, JOINTS DIP 45 DEG., OPEN, NON-PLANAR DISCONTINUITIES, MODERATE PERMIABILITY. NOTE: DRILLING DISRUPTED CORE
133.50	0.20	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 9 DEG., WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
133.53	0.03	100		60% SANDSTONE,MEDIUM GRAINED 40% COAL	GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
134.03	0.50	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH NORMAL GRADED BEDDING, MODERATE PERMIABILITY.
134.20	0.17	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
134.33	0.13	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
134.35	0.02	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 9 DEG., MODERATE PERMIABILITY.
134.45	0.10	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
134.56	0.11	100		60% SILTSTONE 20% COAL 20% MUDSTONE	LIGHT GREY. LENSES. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
134.68	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, LENSES, UNWEATHERED, MODERATELY WEAK ROCK, WITH FLAME/PULL STRUCTS, MODERATE PERMIABILITY.
134.80	0.12	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
134.86	0.06	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
135.80	0.94	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY. NOTE: JOINTS ALSO AT 85 DEG
136.70	0.90	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
136.75	0.05	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
137.04	0.29	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
137.08	0.04	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
138.30	1.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 9 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
138.65	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, BADLY BROKEN, LIGHT GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
141.50	2.85	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, MODERATE PERMIABILITY.
142.15	0.65	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
142.17	0.02	100		95% SANDSTONE 5% COAL, DULL	MED.-FINE GRAINED, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.
143.11	0.94	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG., WITH PLANT REMAINS, MODERATE PERMIABILITY.
143.53	0.42	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
143.64	0.11	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
143.66	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
143.67	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
143.87	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
144.64	0.77	100		50% SILTSTONE 50% MUDSTONE	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
144.72	0.08	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
144.89	0.17	100	40T12	100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATE PERMIABILITY.
145.04	0.15	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, MODERATE PERMIABILITY.
145.08	0.04	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BROWN-BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
145.18	0.10	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG., MODERATE PERMIABILITY.
			TOP OF MT. NICHOLAS MIDDLE 2 : 438.60 M R.L.		
145.30	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
145.40	0.10	100		100% COAL, DULL	UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.43	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.46	0.03	100		100% COAL, HEAVY DULL	UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.54	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.60	0.06	100		100% MUDSTONE	COALY, BANDS, GREY, UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.71	0.11	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, MODERATE PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
145.78	0.07	100		50% MUDSTONE 50% COAL, DULL	CARBONACEOUS, STREAKS, GREY. BANDS. UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.81	0.03	100		100% COAL, DULL	UNWEATHERED, WEAK ROCK, MODERATE PERMIABILITY.
145.82	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
146.00	0.18	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
146.02	0.02	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., MODERATE PERMIABILITY.
146.14	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	WITH CALCITE ON CLEAT, UNWEATHERED, VERY WEAK ROCK, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, MODERATE PERMIABILITY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.96 M; SAMPLED THICKNESS= 0.00 M	
146.15	0.01	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
146.31	0.16	100	40T13	100% SILTSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
147.13	0.82	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
147.37	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
147.40	0.03	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
147.49	0.09	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATE PERMIABILITY.
147.52	0.03	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, MODERATE PERMIABILITY.
148.00	0.48	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
149.12	1.12	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
149.59	0.47	100		50% SILTSTONE 50% MUDSTONE	BANDS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
150.21	0.62	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
150.57	0.36	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
151.50	0.93	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 3 DEG., LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING.
151.70	0.20	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG., LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
152.22	0.52	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
152.50	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
152.56	0.06	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
154.67	2.11	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
154.84	0.17	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
155.71	0.87	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
155.85	0.14	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
156.80	0.95	100		100% SANDSTONE	FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
157.30	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
159.39	2.09	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
159.84	0.45	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
160.70	0.86	100		100% SHEAR/FAULT ZONE	SANDSTONE, BRECCIATED, LIGHT GREY, UNWEATHERED, WEAK ROCK.
					NOTE: UPPER CONTACT OF FAULT BRECCIA DIPPING AT 80 DEG
161.05	0.35	100		95% SHEAR/FAULT ZONE 5% COAL	SANDSTONE, BRECCIATED, LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS MIDDLE 3 : 422.73 M R.L.	
161.37	0.32	100		60% SHEAR/FAULT ZONE 40% MUDSTONE	DULL COAL, BRECCIATED. BRECCIATED, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.32 M; SAMPLED THICKNESS= 0.00 M	
162.30	0.93	100		60% SHEAR/FAULT ZONE 40% MUDSTONE	SILTSTONE, BRECCIATED, LIGHT GREY. BRECCIATED. UNWEATHERED, WEAK ROCK, TIGHT NON PLANAR.
					NOTE: LOWER CONTACT OF FAULT BRECCIA DIPPING AT 60 DEG
163.50	1.20	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
164.68	1.18	100		100% SHEAR/FAULT ZONE	MUDSTONE, BRECCIATED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
					NOTE: DIP OF FAULT BRECCIA CONTACT,UPPER AT 70 DEG,LOWER AT 15 DEG
165.80	1.12	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
167.45	1.65	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
168.40	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
168.85	0.45	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
169.30	0.45	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
169.90	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
170.96	1.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
171.40	0.44	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
172.00	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
172.50	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
173.66	1.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
174.10	0.44	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
175.60	1.50	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
176.32	0.72	100		100% SANDSTONE	VERY FINE GRAINED, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY STRONG ROCK, THINLY BEDDED, BEDS DIP 6 DEG., MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
176.46	0.14	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
177.45	0.99	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
177.72	0.27	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
178.37	0.65	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
178.61	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, WITH PLANT REMAINS.
178.84	0.23	100		60% SILTSTONE 40% SILTSTONE	ARENACEOUS, LIGHT GREY. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
178.92	0.08	100		100% SANDSTONE	VERY FINE GRAINED, SILTY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
179.23	0.31	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
179.29	0.06	100		70% SANDSTONE,MEDIUM GRAINED 30% COAL	LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
181.30	2.01	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
181.50	0.20	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
182.61	1.11	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
182.71	0.10	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
182.79	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
182.80	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 12 DEG.
183.02	0.22	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK.
183.14	0.12	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK.
184.56	1.42	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
184.93	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.12	0.19	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.23	0.11	100		100% SILTSTONE	ARENACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.48	0.25	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.84	0.36	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
186.11	0.27	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH NORMAL GRADED BEDDING.
186.80	0.69	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH NORMAL GRADED BEDDING.
187.50	0.70	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH NORMAL GRADED BEDDING, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
188.70	1.20	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
189.28	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
189.86	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
191.14	1.28	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
191.29	0.15	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
191.63	0.34	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG.
193.54	1.91	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
194.80	1.26	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
195.12	0.32	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
195.58	0.46	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
196.50	0.92	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
196.83	0.33	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
197.05	0.22	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
197.08	0.03	100		50% SANDSTONE 45% MUDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, GREY. PELLETAL. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK.
197.67	0.59	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
198.50	0.83	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
199.00	0.50	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
199.69	0.69	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
199.74	0.05	100		85% CARBONACEOUS MUDSTONE 10% MUDSTONE 5% SANDSTONE,FINE GRAINED	LENSES, BROWN-BLACK. GREY-BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
200.02	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
200.97	0.95	100		95% SANDSTONE 5% COAL	VERY FINE GRAINED, SILTY, GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
201.80	0.83	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: CHANGE DRILL BIT	
202.20	0.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
202.50	0.30	0		CORE LOSS	
203.37	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
203.82	0.45	100		100% SANDSTONE,FINE GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH NORMAL GRADED BEDDING, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
203.96	0.14	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
204.00	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
204.10	0.10	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
204.94	0.84	100		98% SILTSTONE 2% CARBONACEOUS MUDSTONE	ARENACEOUS, LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH ROOTLET BEDS.
205.27	0.33	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 8 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.50	0.23	100		100% SILTSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY STRONG ROCK, TIGHT NON PLANAR.
205.68	0.18	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.68	0.00	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: JOINTS PERPENDICULAR TO EACH OTHER	
206.20	0.52	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.70	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
206.80	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
207.00	0.20	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
207.44	0.44	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
207.47	0.03	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
207.97	0.50	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
208.25	0.28	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
208.50	0.25	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
209.45	0.95	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
210.06	0.61	100		100% SANDSTONE	VERY FINE GRAINED, SILTY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
211.44	1.38	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
211.63	0.19	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
211.65	0.02	0		CORE LOSS	
211.93	0.28	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
211.99	0.06	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
					NOTE: THIS UNIT WITHIN TWO MINOR FAULTS
212.03	0.04	100		60% MUDSTONE 40% SILTSTONE	PELLETAL, LIGHT BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
212.13	0.10	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
212.28	0.15	100	40T14	100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
212.90	0.62	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
213.85	0.95	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
213.98	0.13	100	40T15	100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
214.11	0.13	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
214.50	0.39	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
214.91	0.41	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
215.33	0.42	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
215.50	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
215.62	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
215.66	0.04	100		70% CARBONACEOUS MUDSTONE 20% MUDSTONE 10% SANDSTONE,FINE GRAINED	LENSES, BROWN-BLACK. PELLETAL, LIGHT BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
216.84	1.18	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
217.01	0.17	100	40T16	100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
217.17	0.16	100	40T17	100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
217.22	0.05	100		60% SANDSTONE,MEDIUM GRAINED 40% COAL	LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., WITH MUD PELLETS.

TOP OF MT. NICHOLAS LOWER 1 : 366.56 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
217.32	0.10	100	40A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
217.45	0.13	100	40A01	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
217.46	0.01	100	40A01	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.56	0.10	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.57	0.01	100	40A01	50% COAL, DULL 50% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
217.65	0.08	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.67	0.02	100	40A01	60% COAL, BRIGHT 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
217.86	0.19	100	40A01	90% COAL, DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
217.88	0.02	100	40A01	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
217.96	0.08	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
217.98	0.02	100	40A01	100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
218.05	0.07	100	40A01	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.16	0.11	100	40A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.17	0.01	100	40A01	50% COAL, MID LUSTROUS - DULL 50% MUDSTONE	BLACK. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
218.25	0.08	100	40A01	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
218.26	0.01	100	40A01	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
218.28	0.02	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.33	0.05	100	40A01	60% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL	BLACK. BLACK. WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
218.34	0.01	100	40A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.35	0.01	100	40A01	60% MUDSTONE 40% COAL, DULL	COALY, STREAKS, CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.44	0.09	100	40A01	60% COAL, MID LUSTROUS 40% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.47	0.03	100	40A01	50% CARBONACEOUS MUDSTONE 50% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.48	0.01	100	40A01	50% CARBONACEOUS MUDSTONE 50% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
218.54	0.06	100	40A01	50% CARBONACEOUS MUDSTONE 50% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.61	0.07	100	40A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.64	0.03	100	40A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.70	0.06	100	40A01	75% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL	MUDSTONE, LENSES, BLACK. BRIGHT COAL, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.74	0.04	100	40A01	85% MUDSTONE 15% COAL	CREAM. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.77	0.03	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.79	0.02	100	40A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.80	0.01	100	40A01	95% MUDSTONE 5% COAL	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.86	0.06	100	40A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
218.92	0.06	100	40A01	75% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
218.95	0.03	100	40A01	100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
218.96	0.01	100	40A01	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
218.98	0.02	100	40A01	60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY-BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
219.01	0.03	100	40A01	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
219.04	0.03	100	40A01	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
219.08	0.04	100	40A01	100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
219.18	0.10	100	40A01	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK.
219.22	0.04	100	40A01	75% COAL, MID LUSTROUS - BRIGHT 25% COAL, MID LUSTROUS	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
219.24	0.02	100	40A01	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK.
219.35	0.11	100	40A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
219.36	0.01	100	40A01	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
219.37	0.01	100	40A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
219.39	0.02	100	40A01	100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
219.41	0.02	100	40A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
219.42	0.01	100	40A01	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.20 M; SAMPLED THICKNESS= 2.20 M	
219.83	0.41	100	40A02	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
219.90	0.07	100	40T18	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
220.20	0.30	100	40A02	100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
220.28	0.08	100	40T19	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
220.54	0.26	100	40A02	95% MUDSTONE 5% COAL, BRIGHT	STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				TOP OF MT. NICHOLAS LOWER 2 : 363.24 M R.L.	
220.69	0.15	100	40A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
220.97	0.28	100	40A03	100% COAL, MID LUSTROUS - DULL	UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
220.98	0.01	100	40A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
221.07	0.09	100	40A03	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK.
221.23	0.16	100	40A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
221.28	0.05	100	40A03	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
221.29	0.01	100	40A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
221.30	0.01	100	40A03	100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
221.47	0.17	100	40A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
221.51	0.04	100	40A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	UNWEATHERED, MODERATELY WEAK ROCK.
221.56	0.05	100	40A03	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	UNWEATHERED, MODERATELY WEAK ROCK.
221.74	0.18	100	40A03	100% COAL, MID LUSTROUS - DULL	UNWEATHERED, MODERATELY WEAK ROCK.
221.76	0.02	100	40A03	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK.
221.78	0.02	100	40A03	100% MUDSTONE	KAOLINITIC, PELLETAL, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
221.82	0.04	100	40A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
221.83	0.01	100	40A03	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
221.89	0.06	100	40A03	100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
221.90	0.01	100	40A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
221.95	0.05	100	40A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
221.96	0.01	100	40A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.03	0.07	100	40A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
222.05	0.02	100	40A03	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
222.10	0.05	100	40A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.18	0.08	100	40A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
222.22	0.04	100	40A03	100% MUDSTONE	BRIGHT COAL, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
222.35	0.13	100	40A03	100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.36	0.01	100	40A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
222.40	0.04	100	40A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.43	0.03	100	40A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.48	0.05	100	40A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.52	0.04	100	40A03	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
222.53	0.01	100	40A03	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
222.59	0.06	100	40A03	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
222.61	0.02	100	40A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
222.65	0.04	100	40A03	80% CARBONACEOUS MUDSTONE 20% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, BROWN-BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.11 M; SAMPLED THICKNESS= 2.11 M					
222.67	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
222.75	0.08	100	40T20	100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH NORMAL GRADED BEDDING.
222.82	0.07	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH NORMAL GRADED BEDDING.
223.00	0.18	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH NORMAL GRADED BEDDING.
223.90	0.90	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
223.97	0.07	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
225.50	1.53	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
225.85	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
226.50	0.65	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
226.98	0.48	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
227.12	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
227.23	0.11	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. KAOLINITIC, PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
227.95	0.72	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
228.12	0.17	100		60% SANDSTONE 40% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. KAOLINITIC, PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 1 DEG., WITH MUD PELLETS.
229.10	0.98	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MASSIVE.
229.50	0.40	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	105.07 - 105.30 M	0.23 M
M1	0.00 M	119.40 - 119.89 M	0.49 M
M2	0.00 M	145.18 - 146.14 M	0.96 M
M3	0.00 M	161.05 - 161.37 M	0.32 M
L1	2.20 M	217.22 - 219.42 M	2.20 M
L2	2.11 M	220.54 - 222.65 M	2.11 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
40T01	77.95 - 78.09 M	0.14 M
40T02	78.25 - 78.39 M	0.14 M
40T04	78.83 - 78.96 M	0.13 M
40T05	85.98 - 86.12 M	0.14 M
40T06	86.12 - 86.27 M	0.15 M
40T07	87.47 - 87.62 M	0.15 M
40T08	87.68 - 87.84 M	0.16 M
40T09	97.58 - 97.71 M	0.13 M
40T10	97.84 - 97.87 M	0.03 M
40T11	97.87 - 98.00 M	0.13 M
40T12	144.72 - 144.89 M	0.17 M
40T13	146.15 - 146.31 M	0.16 M
40T14	212.13 - 212.28 M	0.15 M
40T15	213.85 - 213.98 M	0.13 M
40T16	216.84 - 217.01 M	0.17 M
40T17	217.01 - 217.17 M	0.16 M
40A01	217.22 - 219.42 M	2.20 M
40A02	219.42 - 219.83 M	0.41 M
40T18	219.83 - 219.90 M	0.07 M
40A02	219.90 - 220.20 M	0.30 M
40T19	220.20 - 220.28 M	0.08 M
40A02	220.28 - 220.54 M	0.26 M
40A03	220.54 - 222.65 M	2.11 M
40T20	222.67 - 222.75 M	0.08 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 41

HOLE TYPE	CORE
EASTING	591,199 M AM GRID
NORTHING	5,398,605 M AM GRID
ELEVATION	448.84 M
TOTAL DEPTH DRILLED	118.00 M
DRILLING STARTED	24/ 4/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
28.00	28.00			100% DOLERITE	SCREE, HIGHLY WEATHERED.
31.00	3.00	60		60% MUDSTONE 30% SANDSTONE 10% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, LIGHT GREY. FRAGMENTS, BROWN-BLACK. HIGHLY WEATHERED, WEAK ROCK.
34.00	3.00	50		70% MUDSTONE 30% SILTSTONE	GREY. FRAGMENTS, GREY. HIGHLY WEATHERED, WEAK ROCK.
36.92	2.92	50		60% SILTSTONE 40% SILTSTONE	CARBONACEOUS, GREY. FRAGMENTS, CARBONACEOUS, GREY-GREEN. HIGHLY WEATHERED, WEAK ROCK.
37.38	0.46			50% MUDSTONE 50% COAL, DULL	DARK GREY. FRAGMENTS, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK.
38.00	0.62	0		CORE LOSS	
38.20	0.20			100% SANDSTONE,MEDIUM GRAINED	GREY-GREEN, HIGHLY WEATHERED, WEAK ROCK.
39.00	0.80	0		CORE LOSS	
39.08	0.08			50% MUDSTONE 50% COAL, DULL	DARK GREY. FRAGMENTS, BLACK. HIGHLY WEATHERED, WEAK ROCK.
39.50	0.42	0		CORE LOSS	
39.70	0.20			100% MUDSTONE	CALCAREOUS, CREAM, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
40.30	0.60			50% MUDSTONE 50% COAL, DULL	LIGHT GREY. BLACK. WEAK ROCK.
41.42	1.12	5		50% SANDSTONE,FINE GRAINED 47% SANDSTONE,FINE GRAINED 3% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, LIGHT GREY. STREAKS, BLACK. HIGHLY WEATHERED, WEAK ROCK.
42.00	0.58	25		97% SILTSTONE 3% CARBONACEOUS SHALE	LIGHT GREY. BANDS, BLACK. HIGHLY WEATHERED, WEAK ROCK.
43.00	1.00	10		100% DOLERITE	SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
46.00	3.00	40		65% DOLERITE 30% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	MODERATELY WEATHERED.
49.00	3.00	16		50% DOLERITE 40% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	DARK GREY. MODERATELY WEATHERED.
49.50	0.50			100% SANDSTONE,FINE GRAINED	YELLOW-BROWN, MODERATELY WEATHERED, WEAK ROCK.
50.40	0.90	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
51.54	1.14			70% SILTSTONE 28% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	GREY. FRAGMENTS, YELLOW-BROWN. STREAKS. MODERATELY WEATHERED, WEAK ROCK.
52.00	0.46			60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	YELLOW-BROWN. DARK BROWN.
55.00	3.00	10		100% DOLERITE	SCREE, SLIGHTLY WEATHERED.
58.00	3.00	50		100% DOLERITE	SCREE, EXTREMELY SRONG ROCK.
		BASE OF WEATHERING			
61.00	3.00	80		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.97	3.97			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
65.89	0.92			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
66.57	0.68			85% SANDSTONE,MEDIUM GRAINED 12% COAL 3% MUDSTONE	GREY. LAMINAE, LENSES, BLACK. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
73.00	6.43			99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
87.35	14.35			100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
88.00	0.65			100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
88.51	0.51	0		CORE LOSS	
88.84	0.33			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 57 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
89.60	0.76			100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
89.99	0.39			90% MUDSTONE 10% SILTSTONE	GREY-BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.54	0.55			75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	LIGHT GREY. CARBONACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
90.62	0.08	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, NON SLAKING, NON STICKY.
90.85	0.23	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
91.02	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
91.06	0.04	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
93.95	2.89	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
94.25	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
94.58	0.33	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
95.30	0.72	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
96.94	1.64	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
97.28	0.34	100		100% MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
97.78	0.50	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
98.31	0.53	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
98.47	0.16	100	41T01	70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
98.57	0.10	100	41T02	70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
98.67	0.10	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
98.91	0.24	100		75% SILTSTONE 25% MUDSTONE	LIGHT GREY. CARBONACEOUS, LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
99.03	0.12	100	41T03	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
99.16	0.13	100	41T04	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
99.21	0.05	100	41A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
99.22	0.01	100	41A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
99.37	0.15	100	41A01	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
99.38	0.01	100	41A01	100% SILTSTONE	CALCAREOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
99.41	0.03	100	41A01	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 1 : 349.43 M R.L.	
99.81	0.40	100	41A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 82 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
99.82	0.01	100	41A02	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
100.48	0.66	30	41A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
100.50	0.02	100	41A02	70% CARBONACEOUS MUDSTONE 30% COAL	BROWN-BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
100.60	0.10	100	41A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.65	0.05	100	41A02	75% COAL, MID LUSTROUS - BRIGHT 25% MUDSTONE	INTERCALATIONS, BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
100.70	0.05	100	41A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
100.91	0.21	100	41A02	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.11	0.20	100	41A02	97% COAL, DULL 3% MUDSTONE	INTERCALATIONS, BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.12	0.01	100	41A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.13	0.01	100	41A02	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.21	0.08	100	41A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.32	0.11	100	41A02	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.43	0.11	100	41A02	70% COAL, DULL 30% MUDSTONE	INTERCALATIONS, BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
101.45	0.02	100	41A02	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
101.51	0.06	100	41A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.52	0.01	100	41A02	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.57	0.05	100	41A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.62	0.05	100	41A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.66	0.04	100	41A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.69	0.03	100	41A02	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.70	0.01	100	41A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.72	0.02	100	41A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.77	0.05	100	41A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.80	0.03	100	41A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
101.86	0.06	100	41A02	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.45 M; SAMPLED THICKNESS= 2.45 M	
101.95	0.09	100	41T05	100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
102.07	0.12	100	41T06	100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
102.12	0.05	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
102.28	0.16	100		80% SILTSTONE 20% MUDSTONE	INTRUSIVE, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
102.58	0.30	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	CARBONACEOUS, LAMINAE, GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
103.06	0.48	100		95% SANDSTONE 5% CARBONACEOUS SHALE	FINE GRAINED, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
103.32	0.26	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
103.60	0.28	100		75% MUDSTONE 25% SILTSTONE	DARK GREY. BANDS, INTERCALATIONS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
103.68	0.08	100		100% CARBONACEOUS MUDSTONE	COALY, LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 20 DEG., NON SLAKING, NON STICKY.
103.76	0.08	100		80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, BROWN. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
103.90	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
104.20	0.30	100		60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
104.34	0.14	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
104.49	0.15	100		70% MUDSTONE 30% SILTSTONE	GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.53	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.55	0.02	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.67	0.12	100	41T07	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.79	0.12	100	41T08	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.80	0.01	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
104.84	0.04	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	SILTSTONE, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
104.93	0.09	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
105.01	0.08	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	GREY-GREEN. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
105.11	0.10	100	41T09	50% CLAYSTONE 50% CARBONACEOUS MUDSTONE	LENSES, GREY-GREEN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY. NOTE: MORE CARBONACEOUS TOWARDS BASE

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
				TOP OF MT. NICHOLAS LOWER 2 : 343.73 M R.L.	
105.14	0.03	100	41A03	95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
105.25	0.11	100	41A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
105.37	0.12	100	41A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
105.42	0.05	100	41A03	80% COAL, DULL 20% MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
105.58	0.16	100	41A03	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
105.66	0.08	100	41A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
105.74	0.08	100	41A03	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, MODERATELY STICKY.
105.90	0.16	100	41A03	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
106.02	0.12	100	41A03	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
106.03	0.01	100	41A03	100% CLAYSTONE	LENSES, BROWN, UNWEATHERED, SOFT, NON SLAKING, MODERATELY STICKY.
106.07	0.04	100	41A03	100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING, NON STICKY.
106.10	0.03	100	41A03	100% COAL, MID LUSTROUS - DULL	UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
106.14	0.04	100	41A03	70% CARBONACEOUS MUDSTONE 30% COAL, HEAVY DULL	LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
106.25	0.11	100	41A03	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.30	0.05	100	41A03	95% COAL, MID LUSTROUS - BRIGHT 5% MUDSTONE	LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
106.36	0.06	100	41A03	100% MUDSTONE	SILTSTONE, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
106.38	0.02	100	41A03	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
106.57	0.19	100	41A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
106.66	0.09	100	41A03	80% CARBONACEOUS MUDSTONE 20% COAL	INTERCALATIONS, BROWN-BLACK. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.55 M; SAMPLED THICKNESS= 1.55 M

106.70	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
					NOTE: SHEAR AT TOP OF UNIT
106.84	0.14	100	41T10	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
106.93	0.09	100	41T11	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
106.94	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
107.47	0.53	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
107.58	0.11	100	41T12	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
107.63	0.05	100	41T13	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
108.00	0.37	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
108.39	0.39	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LUSTROUS, BANDS, GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
108.78	0.39	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
110.84	2.06	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
111.42	0.58	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LENSES, LIGHT GREY, UNWEATHERED, STRONG ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., NON SLAKING, NON STICKY.
117.62	6.20	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
118.00	0.38	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	2.45 M	99.41 - 101.86 M	2.45 M
L2	1.55 M	105.11 - 106.66 M	1.55 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
41T01	98.31 - 98.47 M	0.16 M
41T02	98.47 - 98.57 M	0.10 M
41T03	98.91 - 99.03 M	0.12 M
41T04	99.03 - 99.16 M	0.13 M
41A01	99.16 - 99.41 M	0.25 M
41A02	99.41 - 101.86 M	2.45 M
41T05	101.86 - 101.95 M	0.09 M
41T06	101.95 - 102.07 M	0.12 M
41T07	104.55 - 104.67 M	0.12 M
41T08	104.67 - 104.79 M	0.12 M
41T09	105.01 - 105.11 M	0.10 M
41A03	105.11 - 106.66 M	1.55 M
41T10	106.70 - 106.84 M	0.14 M
41T11	106.84 - 106.93 M	0.09 M
41T12	107.47 - 107.58 M	0.11 M
41T13	107.58 - 107.63 M	0.05 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 42

HOLE TYPE	CORE
EASTING	591,764 M AM GRID
NORTHING	5,401,381 M AM GRID
ELEVATION	579.68 M
TOTAL DEPTH DRILLED	236.10 M
DRILLING STARTED	27/ 4/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
21.70	21.70			100% DOLERITE	SCREE.
23.71	2.01	40		100% SANDSTONE,FINE GRAINED	YELLOW-BROWN, MODERATELY WEATHERED, WEAK ROCK.
24.07	0.36			75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS. WEAK ROCK.
25.78	1.71	55		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK.
28.78	3.00	60		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK.
29.80	1.02	30		99% SANDSTONE,FINE GRAINED 1% MUDSTONE	LIGHT GREY. FRAGMENTS, DARK GREY. WEAK ROCK.
30.94	1.14	0		CORE LOSS	
31.91	0.97			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 58 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
32.27	0.36			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
32.70	0.43			100% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
32.95	0.25			100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, MODERATELY WEATHERED, WEAK ROCK.
33.46	0.51			100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
33.89	0.43			100% SANDSTONE,FINE GRAINED	CREAM, WITH LIMONITE ON JOINTS, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 52 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
34.02	0.13			100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WITH LIMONITE ON JOINTS, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 32 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
34.91	0.89			100% MUDSTONE	CARBONACEOUS, STREAKS, BROWN, WITH LIMONITE ON JOINTS, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
35.57	0.66			100% SILTSTONE	BROWN, MODERATELY WEATHERED, WEAK ROCK.
36.14	0.57			100% SILTSTONE	CARBONACEOUS, FRAGMENTS, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.55	0.41			100% SILTSTONE	BROWN, MODERATELY WEATHERED, WEAK ROCK.
37.91	1.36			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, WITH LIMONITE ON JOINTS, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
38.27	0.36	0		CORE LOSS	
39.84	1.57			100% SANDSTONE,MEDIUM GRAINED	BROWN, MODERATELY WEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
40.00	0.16			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, BROWN, MODERATELY WEATHERED, WEAK ROCK, BEDS DIP 13 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
40.13	0.13			75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	GREY. PELLETAL, BLACK. SLIGHTLY WEATHERED, WEAK ROCK.
40.70	0.57			100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR.
40.91	0.21			100% SANDSTONE,MEDIUM GRAINED	BROWN, MODERATELY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 66 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
40.95	0.04			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT BROWN, MODERATELY WEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.47	1.52			100% SANDSTONE	MED.-COARSE GRAINED, BROWN, WITH LIMONITE ON JOINTS, MODERATELY WEATHERED, WEAK ROCK, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.67	0.20	0		CORE LOSS	
43.26	0.59			100% MUDSTONE	GREY, WITH LIMONITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.30	0.04			100% CLAY	GREY-BROWN, SLIGHTLY WEATHERED, VERY WEAK ROCK.
43.69	0.39			90% CARBONACEOUS MUDSTONE 10% SILTSTONE	BLACK. GREY. SLIGHTLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.91	0.22			100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
44.63	0.72			75% SILTSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, LIGHT GREY. SLIGHTLY WEATHERED, WEAK ROCK, BEDS DIP 13 DEG., WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
44.83	0.20			75% SILTSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, LIGHT GREY. SLIGHTLY WEATHERED, VERY WEAK ROCK.
44.90	0.07	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.17	0.27			80% CARBONACEOUS MUDSTONE 20% CLAY	BLACK. LIGHT BROWN. MODERATELY WEATHERED, VERY WEAK ROCK.
45.99	0.82			100% MUDSTONE	LIGHT GREY, VERY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, MODERATELY STICKY.
		BASE OF WEATHERING			
46.48	0.49			100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
46.51	0.03			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
47.04	0.53			100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
47.80	0.76			60% MUDSTONE 20% CARBONACEOUS MUDSTONE 20% SILTSTONE	GREY. BLACK. DARK GREY. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.75	0.95			60% MUDSTONE 40% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.25	0.50			70% CARBONACEOUS MUDSTONE 30% MUDSTONE	BLACK. LAMINAE, GREY. UNWEATHERED, WEAK ROCK, BEDS DIP 4 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.82	0.57			90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. LAMINAE, GREY. UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
50.02	0.20			100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
50.80	0.78			75% CARBONACEOUS MUDSTONE 15% MUDSTONE 10% SANDSTONE,FINE GRAINED	COALY, DARK GREY. COALY, DARK GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, RAPID SLAKING.
50.97	0.17			80% MUDSTONE 20% COAL	CARBONACEOUS, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS.
51.54	0.57			100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, SLOW SLAKING.
52.24	0.70			65% MUDSTONE 30% SILTSTONE 5% COAL	CARBONACEOUS, BLACK. ARENACEOUS, DARK GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.49	0.25			75% SANDSTONE,FINE GRAINED 20% MUDSTONE 5% COAL	CARBONACEOUS, DARK GREY. CARBONACEOUS, LAMINAE, DARK GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK.
52.53	0.04			80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
53.34	0.81			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
53.54	0.20	0		CORE LOSS	
53.74	0.20			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
53.84	0.10	0		CORE LOSS	
54.15	0.31			100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
54.26	0.11			100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
54.36	0.10	0		CORE LOSS	
54.68	0.32			100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
54.75	0.07	0		CORE LOSS	
55.06	0.31			100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, RAPID SLAKING.
55.16	0.10			95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
55.21	0.05			95% CARBONACEOUS MUDSTONE 5% COAL	DARK GREY. FRAGMENTS. UNWEATHERED, WEAK ROCK.
55.32	0.11			100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
55.42	0.10			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
55.70	0.28			75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
55.91	0.21	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
56.01	0.10			90% MUDSTONE 10% COAL	LIGHT BROWN. BANDS, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
56.40	0.39			80% CARBONACEOUS MUDSTONE 20% SANDSTONE	BLACK. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
56.50	0.10			60% CARBONACEOUS MUDSTONE 40% COAL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
56.88	0.38			80% MUDSTONE 20% SANDSTONE	CARBONACEOUS, DARK GREY. CARBONACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
56.93	0.05			100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
56.96	0.03			100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
57.02	0.06			90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
57.10	0.08			100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
57.13	0.03			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
57.17	0.04			100% MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
57.30	0.13			100% CARBONACEOUS MUDSTONE	GRADING TO, COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
57.34	0.04			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
57.40	0.06			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
57.55	0.15			75% CARBONACEOUS MUDSTONE 25% SILTSTONE	BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
57.63	0.08			100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
57.69	0.06			100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
57.74	0.05			100% COAL, MID LUSTROUS - DULL	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
57.80	0.06			95% COAL, HEAVY DULL 5% MUDSTONE	BLACK. LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
57.87	0.07			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
57.93	0.06			95% MUDSTONE 5% COAL	GREY-BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
58.22	0.29			80% COAL, HEAVY DULL 15% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BLACK. LENSES, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
58.26	0.04			90% CARBONACEOUS MUDSTONE 10% COAL, HEAVY DULL	GREY-BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
58.29	0.03			100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
58.38	0.09			95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
58.44	0.06			90% MUDSTONE 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
58.48	0.04			100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
58.61	0.13			100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
58.88	0.27			80% COAL, HEAVY DULL 15% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BLACK. LENSES, FRAGMENTS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT NON PLANAR.
58.91	0.03			100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
59.08	0.17			100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
59.26	0.18			90% CARBONACEOUS MUDSTONE 10% COAL, HEAVY DULL	BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
59.51	0.25			100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
59.54	0.03			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
59.65	0.11			100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
59.74	0.09			100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
59.77	0.03			100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
59.85	0.08			100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
59.98	0.13			100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
60.01	0.03			100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
60.46	0.45			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
60.58	0.12			100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS.
60.74	0.16			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
61.91	1.17			75% MUDSTONE 25% SILTSTONE	CARBONACEOUS, STREAKS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.02	0.11			100% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
62.17	0.15			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, DARK GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
63.12	0.95			85% MUDSTONE 10% SILTSTONE 5% SANDSTONE,FINE GRAINED	LAMINAE, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
63.35	0.23	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.45	0.10			100% MUDSTONE	BADLY BROKEN, LIGHT GREY, UNWEATHERED.
63.78	0.33			75% SANDSTONE,FINE GRAINED 20% MUDSTONE 5% CARBONACEOUS MUDSTONE	LIGHT GREY. LIGHT BROWN. UNWEATHERED, WEAK ROCK.
64.02	0.24			100% MUDSTONE	LAMINAE, BADLY BROKEN, DARK GREY, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
64.22	0.20	0		CORE LOSS	
64.27	0.05			100% COAL, HEAVY DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
64.63	0.36	0		CORE LOSS	
64.78	0.15			100% MUDSTONE	CREAM, UNWEATHERED.
64.84	0.06			100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
64.91	0.07			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
65.10	0.19	0		CORE LOSS	
65.14	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
65.19	0.05	100		100% MUDSTONE	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.24	0.05	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, MODERATELY STICKY.
65.36	0.12	100		100% MUDSTONE	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.40	0.04	100		100% CLAYSTONE	SILTSTONE, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
65.75	0.35	100		100% MUDSTONE	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING.
66.16	0.41	100		100% MUDSTONE	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
66.21	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.71	0.50	100		100% MUDSTONE	FOSSILIFERROUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
66.81	0.10	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
66.84	0.03	100		100% MUDSTONE	BADLY BROKEN, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
66.89	0.05	100		80% COAL, DULL 20% MUDSTONE	BADLY BROKEN, BLACK. LENSES, BADLY BROKEN, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
67.00	0.11	100		100% COAL, HEAVY DULL	UNWEATHERED, MODERATELY WEAK ROCK.
67.06	0.06	100		80% MUDSTONE 20% COAL, HEAVY DULL	INTERCALATIONS, BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG.
67.15	0.09	100		80% COAL, HEAVY DULL 20% MUDSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG.
67.19	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
67.35	0.16	100		65% MUDSTONE 35% COAL, HEAVY DULL	INTERCALATIONS, BADLY BROKEN, CREAM. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: JOINT ORIENTATION VARIABLE
67.52	0.17	100		90% COAL, DULL 10% MUDSTONE	BADLY BROKEN. LENSES, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
67.72	0.20	100		60% MUDSTONE 40% COAL, DULL	INTERCALATIONS, CREAM. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
67.78	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
67.91	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
68.03	0.12	100		70% MUDSTONE 30% COAL, DULL	LIGHT BROWN. INTERCALATIONS, BADLY BROKEN, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.14	0.11	100		95% COAL, HEAVY DULL 5% MUDSTONE	BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
68.18	0.04	100		50% MUDSTONE 50% COAL, DULL	INTERCALATIONS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
68.29	0.11	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, WITH NORMAL GRADED BEDDING, SLOW SLAKING.
68.43	0.14	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.51	0.08	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK. NOTE: OVERDRILLED
68.63	0.12	100		100% COAL, DULL	BADLY BROKEN, BLACK, WITH LENSES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
68.71	0.08	100		80% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% MUDSTONE	BLACK. LENSES, PELLETAL, GREY. UNWEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
69.27	0.56	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: SAME STRIKE OPPOSITE DIP
69.57	0.30	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.67	0.10	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.74	0.07	0		CORE LOSS	
69.80	0.06	100		80% COAL, BRIGHT 20% MUDSTONE	BADLY BROKEN. LENSES, GREY-BROWN.
69.85	0.05	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEAK ROCK.
70.87	1.02	0		CORE LOSS	
72.22	1.35	100		100% MUDSTONE	GREY, UNWEATHERED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT NON PLANAR, SLOW SLAKING.
72.33	0.11	100		100% MUDSTONE	GREY, WITH VESICULAR CALCITE, UNWEATHERED, WEAK ROCK.
72.56	0.23	100		100% MUDSTONE	ARGILLACEOUS, GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
73.50	0.94	100		70% MUDSTONE 30% SILTSTONE	INTERCALATIONS, GREY. CALCAREOUS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH CROSS LAMINATION.
74.25	0.75	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING.
74.59	0.34	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	INTERCALATIONS, BLACK. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, SLOW SLAKING.
75.04	0.45	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, LITHIC, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, SLOW SLAKING.
75.29	0.25	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
75.48	0.19	100		100% MUDSTONE	ARGILLACEOUS, FOSSILIFERROUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
76.28	0.80	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: SAME STRIKE OPPOSITE DIP
76.88	0.60	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
77.10	0.22	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
77.56	0.46	100		60% MUDSTONE 40% CLAYSTONE	INTERCALATIONS, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH BURROWING.
77.87	0.31	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
77.91	0.04	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
78.56	0.65	100		100% CARBONACEOUS MUDSTONE	ARKOSIC, LITHIC, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING.
78.93	0.37	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.98	0.05	100		100% CLAYSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
79.03	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
79.04	0.01	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
79.06	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
79.30	0.24	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
79.45	0.15	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
80.00	0.55	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 56 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
81.80	1.80	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, LIGHT GREY. SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
82.09	0.29	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
82.75	0.66	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, LIGHT GREY. SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH BURROWING, WITH DISTURBED BEDDING, MODERATELY SPACED JOINTS, JOINTS DIP 26 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
82.86	0.11	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	LAMINAE, INTERCALATIONS, BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG.
82.91	0.05	100		95% COAL 5% MUDSTONE	CARBONACEOUS, BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG.
83.16	0.25	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	LAMINAE, INTERCALATIONS, BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.53	0.37	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	LAMINAE, INTERCALATIONS, BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
83.74	0.21	100		85% MUDSTONE 15% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
83.75	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
83.79	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
83.81	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.06	0.25	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
84.55	0.49	100		100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.74	0.19	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
85.03	0.29	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
85.17	0.14	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
85.26	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.28	0.02	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
85.30	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.38	0.08	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
85.40	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.42	0.02	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
85.45	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.46	0.01	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
85.63	0.17	100		97% COAL, DULL 3% MUDSTONE	BROWN-BLACK. STREAKS, LAMINAE, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
85.64	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.76	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.83	0.07	100		100% MUDSTONE	LITHIC, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
85.93	0.10	100		100% MUDSTONE	CALCAREOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
86.02	0.09	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
86.04	0.02	100		100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.05	0.01	100		100% MUDSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK.
86.10	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.14	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
86.18	0.04	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.22	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
86.26	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.37	0.11	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, PELLETAL, LIGHT BROWN. COALY, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
86.42	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: SMALL FAULTED LOWER CONTACT	
86.55	0.13	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK.
87.41	0.86	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
87.42	0.01	100		100% MUDSTONE	LENSES, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
88.07	0.65	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
88.60	0.53	100		100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
88.79	0.19	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
90.03	1.24	100		70% MUDSTONE 30% SILTSTONE	INTERCALATIONS, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS UPPER 8 : 489.65 M R.L.	
90.29	0.26	100		100% COAL, HEAVY DULL	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.33	0.04	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, LIGHT BROWN. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG.
90.35	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.43	0.08	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, LIGHT BROWN. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
90.45	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.50	0.05	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
90.51	0.01	100		100% CARBONACEOUS MUDSTONE	LITHIC, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
90.77	0.26	100		99% COAL, DULL WITH FEW BRIGHT BANDS 1% CARBONACEOUS MUDSTONE	BLACK. STREAKS, LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
90.88	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
90.90	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.87 M; SAMPLED THICKNESS= 0.00 M	
91.53	0.63	100		60% MUDSTONE 40% MUDSTONE	FOSSILIFERROUS, GREY-BROWN. INTERCALATIONS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH DISTURBED BEDDING, NON SLAKING.
92.24	0.71	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
93.88	1.64	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	SILTSTONE, INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., SLOW SLAKING.
94.29	0.41	100		85% SANDSTONE,FINE GRAINED 15% MUDSTONE	INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
94.61	0.32	100		85% MUDSTONE 15% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
94.72	0.11	100		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 12 DEG., WITH CROSS LAMINATION.
101.30	6.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING, WITH PLANT REMAINS, VERY WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
101.68	0.38	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
102.10	0.42	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 21 DEG., WITH CROSS LAMINATION.
103.73	1.63	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
104.33	0.60	100		98% SANDSTONE,MEDIUM GRAINED 2% COAL	INTERCALATIONS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
105.15	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION.
105.58	0.43	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
105.68	0.10	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
107.80	2.12	100		100% SANDSTONE,COARSE GRAINED	LITHIC, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
107.93	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
					NOTE: SAME STRIKE OPPOSITE DIP ; SLICKENSIDES 30 DEG FROM TRUE DIP
108.41	0.48	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GRADING TO, SCREE, GREY. FOSSILIFERROUS, LENSES, GREY-BROWN. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH NORMAL GRADED BEDDING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
108.78	0.37	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 6 DEG., WITH PLANT REMAINS.
109.22	0.44	100		100% SANDSTONE,COARSE GRAINED	LITHIC, ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
109.44	0.22	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	LENSES, FOSSILIFERROUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
109.69	0.25	100		100% SANDSTONE	FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 14 DEG., WITH NORMAL GRADED BEDDING, WITH CROSS LAMINATION.
113.77	4.08	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH MUD PELLETS.
114.00	0.23	100		70% SANDSTONE,COARSE GRAINED 30% MUDSTONE	LITHIC, ARKOSIC, LIGHT GREY. PELLETAL, LENSES, GREY-GREEN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 6 DEG.
114.68	0.68	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
115.30	0.62	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
115.65	0.35	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	SILTSTONE, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 6 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION.
115.81	0.16	100		80% MUDSTONE 20% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH BURROWING, NON SLAKING.
116.64	0.83	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT EROSIONAL, WITH PLANT REMAINS.
117.33	0.69	100		70% SILTSTONE 20% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.31	0.98	100		60% MUDSTONE 35% SILTSTONE 5% SANDSTONE,FINE GRAINED	INTERCALATIONS, DARK GREY. BANDS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION, WITH PLANT REMAINS, NON SLAKING.
118.74	0.43	100		55% MUDSTONE 45% SILTSTONE	BANDS, INTERCALATIONS, DARK GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL.
118.84	0.10	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GRADING TO, GREY. BANDS, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
118.92	0.08	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. LENSES, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
118.97	0.05			100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.00	0.03			70% SANDSTONE,MEDIUM GRAINED 30% COAL, HEAVY DULL	INTERCALATIONS, GREY-GREEN. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
119.04	0.04	100		99% CARBONACEOUS MUDSTONE 1% COAL, DULL	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
119.12	0.08	100		100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED.
119.17	0.05	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED.
119.21	0.04	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	GRADING TO, LENSES, BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
119.51	0.30	100		99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BLACK. LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 62 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
119.58	0.07	100		95% CARBONACEOUS MUDSTONE 5% COAL, DULL WITH FEW BRIGHT BANDS	INTERCALATIONS, BROWN-BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 76 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
119.62	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
119.66	0.04	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL WITH FEW BRIGHT BANDS	INTERCALATIONS, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
119.82	0.16	100		50% SILTSTONE 45% MUDSTONE 5% SANDSTONE,FINE GRAINED	GREY. GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
120.25	0.43	100		55% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	GRADING TO, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH BURROWING.
120.48	0.23	100		80% MUDSTONE 20% SILTSTONE	INTERCALATIONS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
120.58	0.10	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
121.01	0.43	100		55% MUDSTONE 45% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
121.93	0.92	100		60% SANDSTONE,FINE GRAINED 30% MUDSTONE 10% SILTSTONE	INTERCALATIONS, LIGHT GREY. BANDS, GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
122.28	0.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
122.58	0.30	100		45% SANDSTONE,FINE GRAINED 45% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	GRADING TO. CARBONACEOUS, LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH NORMAL GRADED BEDDING, WITH CROSS LAMINATION.
122.97	0.39	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
123.40	0.43	100		70% MUDSTONE 30% SILTSTONE	INTERCALATIONS, DARK GREY. LAMINAE, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
123.48	0.08	100		90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
123.62	0.14	100		90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, DARK GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
123.73	0.11	100		75% MUDSTONE 25% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG.
123.84	0.11	100		75% MUDSTONE 25% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG.
124.02	0.18	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED.
				TOP OF DALMAYNE C : 455.66 M R.L.	
124.04	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.12	0.08	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLOW SLAKING, MODERATELY STICKY.
				BASE OF DALMAYNE C : THICKNESS= 0.10 M; SAMPLED THICKNESS= 0.00 M	
				TOP OF MT. NICHOLAS MIDDLE 1 : 455.56 M R.L.	
124.29	0.17	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.37	0.08	100		90% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
124.40	0.03	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, SLOW SLAKING.
124.53	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
124.55	0.02	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
124.68	0.13	100		99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
124.75	0.07	100		100% MUDSTONE	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
124.81	0.06	100		100% COAL, HEAVY DULL	BLACK, WITH LAMINAE OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.69 M; SAMPLED THICKNESS= 0.00 M	
124.86	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.93	0.07	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.98	0.05	50		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.06	0.08	85		80% MUDSTONE 20% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
125.16	0.10	100		50% CARBONACEOUS MUDSTONE 40% MUDSTONE 10% COAL	BROWN-BLACK. FOSSILIFERROUS, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.22	0.06	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
125.29	0.07	100		60% MUDSTONE 35% CARBONACEOUS MUDSTONE 5% COAL	FOSSILIFERROUS. BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.43	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
125.50	0.07	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
125.66	0.16	100		90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
125.74	0.08	100	42T03	90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
125.87	0.13	100	42T04	90% MUDSTONE 10% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
126.17	0.30	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	SILTSTONE, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
126.55	0.38	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	SILTSTONE, INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
126.58	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
126.68	0.10	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	COALY, BLACK. LENSES, PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
126.85	0.17	100		85% COAL, DULL 15% MUDSTONE	BLACK. STREAKS, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
126.93	0.08	100		80% MUDSTONE 20% MUDSTONE	ARGILLACEOUS, GREY-BROWN. FOSSILIFERROUS, BROWN. UNWEATHERED, WEAK ROCK.
126.98	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.99	0.01	100		50% COAL, DULL WITH FEW BRIGHT BANDS 50% LIMESTONE	BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
127.00	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.01	0.01	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.23	0.22	100		98% COAL, DULL WITH FEW BRIGHT BANDS 2% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
127.24	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.33	0.09	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
127.37	0.04	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.39	0.02	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	LIGHT BROWN. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.44	0.05	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
127.95	0.51	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. NOTE: SHEARS AT VARIOUS ORIENTATIONS
128.11	0.16	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY-BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
128.15	0.04	100		60% COAL, DULL 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG.
128.33	0.18	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
128.44	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.47	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
129.07	0.60	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	SILTSTONE, INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: ONE CM DISPLACEMENT
129.39	0.32	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	CALCAREOUS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 7 DEG.
129.51	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
129.59	0.08	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
130.20	0.61	100		90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, GREY. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
130.72	0.52	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION.
130.93	0.21	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
131.32	0.39	100		90% MUDSTONE 10% SILTSTONE	GREY. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
132.27	0.95	100		85% SANDSTONE,FINE GRAINED 10% MUDSTONE 5% CARBONACEOUS MUDSTONE	SILTSTONE, LIGHT GREY. INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
133.74	1.47	100		80% MUDSTONE 20% SILTSTONE	INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING.
134.01	0.27	100		98% COAL, HEAVY DULL 2% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
134.10	0.09	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	INTERCALATIONS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
134.49	0.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
134.63	0.14		42T05	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
134.74	0.11		42T06	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
134.87	0.13	100	42A02	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
				TOP OF MT. NICHOLAS MIDDLE 2 : 444.81 M R.L.	
134.92	0.05	100	42A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
134.96	0.04	100	42A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
134.99	0.03	100	42A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.01	0.02	100	42A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.19	0.18	100	42A02	99% COAL, DULL 1% CARBONACEOUS MUDSTONE	BLACK. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
135.24	0.05	100	42A02	99% COAL, MID LUSTROUS 1% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. WITH NODULES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
135.28	0.04	100	42A02	99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. WITH NODULES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
135.29	0.01	100	42A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
135.50	0.21	100	42A02	99% COAL, DULL 1% CARBONACEOUS MUDSTONE	BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
135.52	0.02	100	42A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.61	0.09	100	42A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.63	0.02	100	42A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.74	0.11	100	42A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.80	0.06	100	42A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.82	0.02	100	42A02	70% COAL, BRIGHT 30% COAL, DULL	BANDS, BLACK. BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
135.88	0.06	100	42A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
135.89	0.01	100	42A02	100% COAL, BRIGHT	BANDS, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
135.92	0.03	100	42A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.93	0.01	100	42A02	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.96	0.03	100	42A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
135.99	0.03	100	42A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
136.01	0.02	100	42A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
136.06	0.05	100	42A02	65% MUDSTONE 35% COAL, BRIGHT	CARBONACEOUS, INTERCALATIONS, DARK BROWN. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
136.13	0.07	100	42A02	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.26 M; SAMPLED THICKNESS= 1.26 M	
136.28	0.15	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: JOINT AT BASE OF UNIT	
136.43	0.15	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
				NOTE: JOINTS AT TOP OF UNIT	
136.57	0.14	100	42T07	90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
136.69	0.12	100	42T08	90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
137.16	0.47	100		90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.
139.06	1.90	100		70% SANDSTONE,FINE GRAINED 27% SILTSTONE 3% MUDSTONE	LIGHT GREY. LAMINAE, LENSES, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
139.81	0.75	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
140.12	0.31	100		97% SANDSTONE,MEDIUM GRAINED 2% MUDSTONE 1% SILTSTONE	MASSIVE, CALCAREOUS, LIGHT GREY. PELLETAL, LENSES, GREY. CARBONACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
140.63	0.51	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
143.25	2.62	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
144.01	0.76	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 26 DEG.
144.56	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
147.48	2.92	100		100% SANDSTONE,COARSE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
148.36	0.88	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
148.49	0.13	100		98% SANDSTONE 2% COAL	MED.-FINE GRAINED, GREY. LENSES, STREAKS, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 21 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: SLICKENSIDES AT 90 DEG TO TRUE DIP	
149.29	0.80	100		100% SANDSTONE,MEDIUM GRAINED	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 30 DEG., WITH CROSS LAMINATION.
149.79	0.50	100		70% SANDSTONE 25% SILTSTONE 5% COAL	MED.-COARSE GRAINED, INTERCALATIONS, GREY. LENSES, LIGHT GREY. LENSES, STREAKS, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
149.86	0.07	100		65% SANDSTONE 30% SANDSTONE,FINE GRAINED 5% COAL	MED.-COARSE GRAINED, LITHIC, GREY. PEBBLY, LIGHT GREEN. LENSES, STREAKS, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
149.90	0.04	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
				TOP OF MT. NICHOLAS MIDDLE 3 : 429.78 M R.L.	
150.01	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.11 M; SAMPLED THICKNESS= 0.00 M	
150.09	0.08	100		96% MUDSTONE 4% COAL	CARBONACEOUS, DARK BROWN. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
150.13	0.04	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE	BLACK. MED.-COARSE GRAINED, LENSES, WHITE. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
150.19	0.06	100		100% COAL, HEAVY DULL	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
150.22	0.03	100		99% MUDSTONE 1% COAL	CARBONACEOUS, BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
150.44	0.22	100		60% MUDSTONE 38% SILTSTONE 2% MUDSTONE	CARBONACEOUS, BROWN. GREY-BROWN. CREAM. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES. NOTE: DISPLACEMENT 0.5 CM INTERSECTS ABOVE JOINT AT 90 DEG
151.22	0.78	100		70% SANDSTONE,FINE GRAINED 25% SILTSTONE 5% MUDSTONE	GRADING TO, LIGHT BROWN. GRADING TO, LIGHT BROWN. COALY, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., WITH NORMAL GRADED BEDDING, SLOW SLAKING.
151.50	0.28	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
151.73	0.23	100		70% MUDSTONE 30% SILTSTONE	INTERCALATIONS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
151.77	0.04	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
151.99	0.22	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
152.39	0.40	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
152.80	0.41	100		60% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE	GRADING TO, LIGHT GREY. INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.
153.24	0.44	100		80% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	INTERCALATIONS, LIGHT GREY. LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
153.41	0.17	100		70% SANDSTONE,FINE GRAINED 20% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	LAMINAE, INTERCALATIONS, LIGHT GREY. PELLETAL, BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH PLANT REMAINS.
153.70	0.29	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	SILTSTONE, INTERCALATIONS, GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
154.30	0.60	100		60% SILTSTONE 30% MUDSTONE 10% SANDSTONE,FINE GRAINED	BANDS, INTERCALATIONS, GREY. GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: DISPLACEMENT 0.5 CM
154.46	0.16	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	INTERCALATIONS, GREY. PELLETAL, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
154.51	0.05	100		100% SILTSTONE	LAMINAE, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
154.56	0.05	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
154.86	0.30	100		58% MUDSTONE 40% SILTSTONE 2% SANDSTONE,FINE GRAINED	LAMINAE, BANDS, GREY. INTERCALATIONS, LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH DISTURBED BEDDING, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: DISPLACEMENT 1.0 CM

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
155.32	0.46	100		85% MUDSTONE 10% SILTSTONE 5% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
155.68	0.36	100		98% SILTSTONE 2% SANDSTONE,FINE GRAINED	LAMINAE, INTERCALATIONS, GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION.
155.74	0.06	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
155.84	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
158.56	2.72	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
158.69	0.13	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
159.29	0.60	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.90	1.61	100		98% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS SHALE 1% MUDSTONE	GREY. STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
161.47	0.57	100		60% SANDSTONE,FINE GRAINED 30% SILTSTONE 10% MUDSTONE	BANDS, INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
162.52	1.05	100		98% SANDSTONE 1% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	MED.-COARSE GRAINED, GREY. LENSES, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
164.22	1.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
165.28	1.06	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
167.55	2.27	100		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS SHALE	MASSIVE, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
170.17	2.62	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
170.23	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.26	0.03	100		100% COAL, HEAVY DULL	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
170.69	0.43	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT EROSIONAL.
170.71	0.02	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
171.68	0.97	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
172.65	0.97	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
172.67	0.02	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, INTERCALATIONS, DARK BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
172.79	0.12	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH MUD PELLETS.
173.17	0.38	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
173.22	0.05	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 26 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
173.28	0.06	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 26 DEG.
173.29	0.01	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
173.87	0.58	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
177.54	3.67	100		98% SANDSTONE 1% MUDSTONE 1% CARBONACEOUS SHALE	MED.-COARSE GRAINED, GREY. PELLETAL, DARK GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
179.65	2.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
179.80	0.15	100		70% SANDSTONE 20% CARBONACEOUS MUDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, GREY-BROWN. LENSES, BANDS, BROWN-BLACK. SILTSTONE, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 26 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
180.29	0.49	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
184.33	4.04	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
185.10	0.77	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.88	0.78	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
186.65	0.77	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
187.44	0.79	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
187.57	0.13	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
188.60	1.03	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG.
189.30	0.70	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
189.44	0.14	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
192.32	2.88	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
192.51	0.19	100		100% MUDSTONE	MASSIVE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
193.61	1.10	100		90% MUDSTONE 5% SILTSTONE 5% CARBONACEOUS MUDSTONE	GRADING TO, SILTSTONE, GREY. GREY. STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
194.00	0.39	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
194.07	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
194.92	0.85	100		60% MUDSTONE 39% SILTSTONE 1% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BANDS, LIGHT GREY. COALY, LAMINAE, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.66	0.74	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
197.57	1.91	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
198.55	0.98	100		98% SANDSTONE,FINE GRAINED 2% MUDSTONE	CALCAREOUS, WHITE. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
199.25	0.70	100		96% SANDSTONE 4% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
199.56	0.31	100		80% SANDSTONE,FINE GRAINED 17% SILTSTONE 3% MUDSTONE	BANDS, INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. CARBONACEOUS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
199.75	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
199.83	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
199.85	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
200.46	0.61	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
201.25	0.79	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
202.01	0.76	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 30 DEG.
202.60	0.59	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
203.35	0.75	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
204.66	1.31	100		85% SILTSTONE 12% SANDSTONE,FINE GRAINED 3% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL.
205.00	0.34	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
205.96	0.96	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG.
206.27	0.31	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
207.74	1.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
207.90	0.16	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
209.90	2.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 6 DEG., NON SLAKING, NON STICKY.
210.17	0.27	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
211.09	0.92	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
211.88	0.79	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
212.04	0.16	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
213.30	1.26	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
213.47	0.17	100	42T08	100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
213.64	0.17	100	42T09	100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
213.81	0.17	100	42T10	100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 8 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 2 : 365.87 M R.L.	
213.88	0.07	100	42A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.92	0.04	100	42A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.05	0.13	100	42A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.09	0.04	100	42A01	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
214.12	0.03	100	42A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.19	0.07	100	42A01	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.21	0.02	100	42A01	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.34	0.13	100	42A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.36	0.02	100	42A01	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.40	0.04	100	42A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.45	0.05	100	42A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.49	0.04	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.51	0.02	100	42A01	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.53	0.02	100	42A01	95% TONSTEIN 5% COAL, BRIGHT	GREY-BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
214.55	0.02	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.60	0.05	100	42A01	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.62	0.02	100	42A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.64	0.02	100	42A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.65	0.01	100	42A01	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.77	0.12	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.86	0.09	100	42A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.89	0.03	100	42A01	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.95	0.06	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
214.96	0.01	100	42A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.02	0.06	100	42A01	95% TONSTEIN 5% COAL, BRIGHT	GREY-BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.04	0.02	100	42A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.19	0.15	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.25	0.06	100	42A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.31	0.06	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.33	0.02	100	42A01	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
215.37	0.04	100	42A01	100% TONSTEIN	BRIGHT COAL, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
215.39	0.02	100	42A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
215.51	0.12	100	42A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
215.58	0.07	100	42A01	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.60	0.02	100	42A01	60% COAL, DULL WITH FEW BRIGHT BANDS 40% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.61	0.01	100	42A01	50% MUDSTONE 50% COAL, MID LUSTROUS	BANDS, CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.64	0.03	100	42A01	50% COAL, BRIGHT 50% COAL, MID LUSTROUS	BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
215.71	0.07	100	42A01	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
215.77	0.06	100	42A01	100% COAL, INTERBANDED DULL AND BRIGHT	UNWEATHERED, MODERATELY WEAK ROCK.
215.85	0.08	100	42A01	100% COAL, MID LUSTROUS	UNWEATHERED, MODERATELY WEAK ROCK.
215.87	0.02	100	42A01	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.06 M; SAMPLED THICKNESS= 2.06 M	
215.92	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY.
216.07	0.15	100	42T11	70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% COAL	BANDS, GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
216.24	0.17	100	42T12	70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% COAL	BANDS, GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
216.41	0.17	100	42T13	70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% COAL	BANDS, GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
218.85	2.44	100		70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% COAL	BANDS, GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 6 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
219.74	0.89	100		70% SANDSTONE 20% SILTSTONE 10% COAL	MED.-FINE GRAINED, MASSIVE, LIGHT GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 6 DEG., NON SLAKING, NON STICKY.
221.67	1.93	100		70% SANDSTONE,MEDIUM GRAINED 20% SILTSTONE 10% COAL	MASSIVE, LIGHT GREY. GRADING TO, MUDSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 6 DEG., NON SLAKING, NON STICKY.
222.50	0.83	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 6 DEG.
222.66	0.16	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG.
223.72	1.06	100		90% SANDSTONE 5% SANDSTONE,FINE GRAINED 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. COALY, FRAGMENTS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG., WITH CARBONACEOUS WISPS.
223.82	0.10	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG., WITH MUD PELLETS.
229.34	5.52	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 6 DEG., WITH MUD PELLETS.
229.39	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
229.45	0.06	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
229.86	0.41	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
230.24	0.38	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
234.93	4.69	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	CARBONACEOUS, LAMINAE, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
234.98	0.05	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
235.02	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
235.04	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.07	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
235.11	0.04	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.12	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
235.19	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.23	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.53	0.30	100		100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.74	0.21	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
235.81	0.07	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
236.10	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	90.03 - 90.90 M	0.87 M
DC	0.00 M	124.02 - 124.12 M	0.10 M
M1	0.00 M	124.12 - 124.81 M	0.69 M
M2	1.26 M	134.87 - 136.13 M	1.26 M
M3	0.00 M	149.90 - 150.01 M	0.11 M
L2	2.06 M	213.81 - 215.87 M	2.06 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
42T03	125.66 - 125.74 M	0.08 M
42T04	125.74 - 125.87 M	0.13 M
42T05	134.49 - 134.63 M	0.14 M
42T06	134.63 - 134.74 M	0.11 M
42A02	134.74 - 136.13 M	1.39 M
42T07	136.43 - 136.57 M	0.14 M
42T08	136.57 - 136.69 M	0.12 M
42T08	213.30 - 213.47 M	0.17 M
42T09	213.47 - 213.64 M	0.17 M
42T10	213.64 - 213.81 M	0.17 M
42A01	213.81 - 215.87 M	2.06 M
42T11	215.92 - 216.07 M	0.15 M
42T12	216.07 - 216.24 M	0.17 M
42T13	216.24 - 216.41 M	0.17 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 43

HOLE TYPE	CORE
EASTING	591,513 M AM GRID
NORTHING	5,399,250 M AM GRID
ELEVATION	559.08 M
TOTAL DEPTH DRILLED	238.30 M
DRILLING STARTED	29/ 4/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.05	0.05	100		100% SOIL	DARK BROWN, SLIGHTLY WEATHERED.
43.30	43.25	100		100% DOLERITE	SCREE, GREY, HIGHLY WEATHERED.
44.72	1.42	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK, BEDS DIP 23 DEG., WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
46.74	2.02	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
47.11	0.37	100		99% SANDSTONE,COARSE GRAINED 1% MUDSTONE	GREY-BROWN. PELLETAL, WHITE. HIGHLY WEATHERED, MODERATELY WEAK ROCK, BEDS DIP 20 DEG., WITH MUD PELLETS, WITH CROSS LAMINATION.
47.28	0.17	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
47.77	0.49	100		95% SANDSTONE,COARSE GRAINED 5% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY-BROWN. BANDS, GREY-BROWN. HIGHLY WEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
48.24	0.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, YELLOW-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
48.55	0.31	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, YELLOW-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
48.70	0.15	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.97	0.27	100		95% SANDSTONE,COARSE GRAINED 5% MUDSTONE	GREY-BROWN. PELLETAL, WHITE. WITH ZEOLITE ON JOINTS, HIGHLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 53 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
49.07	0.10	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.75	0.68	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY-BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
50.18	0.43	80		100% SANDSTONE,COARSE GRAINED	MASSIVE, GREY, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
50.46	0.28	5		100% SILTSTONE	BADLY BROKEN, BLACK, HIGHLY WEATHERED, MODERATELY WEAK ROCK.
51.05	0.59	0		CORE LOSS	
51.34	0.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CREAM, HIGHLY WEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.30	0.96	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, BLUE-GREY, HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
53.36	1.06	100		85% SANDSTONE,COARSE GRAINED 15% COAL	BANDS, INTERCALATIONS, GREY-BROWN. STREAKS, FRAGMENTS, BLACK. HIGHLY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 30 DEG., WITH CROSS LAMINATION.
53.96	0.60	5		100% SANDSTONE,COARSE GRAINED	ARKOSIC, BADLY BROKEN, WHITE, MODERATELY WEATHERED, WEAK ROCK.
54.00	0.04	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, DARK GREY, HIGHLY WEATHERED, WEAK ROCK.
55.30	1.30	20		50% SANDSTONE,MEDIUM GRAINED 50% COAL	SCREE, BADLY BROKEN, BLACK. FRAGMENTS, BLACK. HIGHLY WEATHERED, WEAK ROCK.
55.93	0.63	100		100% SANDSTONE,MEDIUM GRAINED	GREY, HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
56.35	0.42	80		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, GREY, HIGHLY WEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
57.42	1.07	100		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS SHALE	BADLY BROKEN, GREY. LENSES. HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: END HQ DRILLING AT 57M	
58.35	0.93	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, GREY, HIGHLY WEATHERED, WEAK ROCK.
58.84	0.49	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS SHALE	GREY. LAMINAE, BLACK. HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
60.97	2.13	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	PELLETAL, BROWN-BLACK. HIGHLY WEATHERED, WEAK ROCK.
61.02	0.05	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, GREY, HIGHLY WEATHERED, WEAK ROCK.
61.70	0.68	100		70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% MUDSTONE	GREY. FRAGMENTS. HIGHLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: JOINT AT BASE OF UNIT	
61.99	0.29	100		50% SANDSTONE,MEDIUM GRAINED 49% SILTSTONE 1% COAL	INTERCALATIONS, GREY. CARBONACEOUS, GREY-BROWN. STREAKS, BLACK. HIGHLY WEATHERED, WEAK ROCK, THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
62.64	0.65	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	INTERCALATIONS. LAMINAE, BROWN. HIGHLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.86	0.22	100		50% SILTSTONE 40% SANDSTONE,FINE GRAINED 10% MUDSTONE	BANDS, INTERCALATIONS. GREY. BANDS, BROWN. HIGHLY WEATHERED, WEAK ROCK.
63.56	0.70	100		98% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	BADLY BROKEN. LAMINAE, BROWN-BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, WITH CROSS LAMINATION.
64.30	0.74	0		CORE LOSS	
64.40	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, GREY, HIGHLY WEATHERED, WEAK ROCK.
64.60	0.20	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS SHALE	GREY. LAMINAE, STREAKS, BROWN. HIGHLY WEATHERED, WEAK ROCK, WITH CROSS LAMINATION, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 66 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
64.70	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, GREY, HIGHLY WEATHERED, WEAK ROCK.
64.87	0.17	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS SHALE	INTERCALATIONS, GREY. BANDS, LAMINAE, BROWN-BLACK. HIGHLY WEATHERED, WEAK ROCK.
65.31	0.44	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	CARBONACEOUS, STREAKS, GREY. BADLY BROKEN, BROWN. WEAK ROCK, WITH MUD PELLETS, VERY CLOSE JOINT SPACING, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF WEATHERING	
65.39	0.08	100		100% MUDSTONE	WHITE, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED.
65.60	0.21	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
65.81	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
66.15	0.34	60		100% MUDSTONE	ARGILLACEOUS, BADLY BROKEN, GREY, UNWEATHERED, VERY WEAK ROCK.
66.53	0.38	60		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	FRAGMENTS, BADLY BROKEN, GREY. ARGILLACEOUS, GREY. UNWEATHERED, VERY WEAK ROCK.
67.30	0.77	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
67.39	0.09	50		50% SILTSTONE 50% MUDSTONE	FRAGMENTS, BADLY BROKEN, GREY. GREY. UNWEATHERED, VERY WEAK ROCK.
67.43	0.04	100		100% SILTSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
67.50	0.07	100		60% MUDSTONE 40% MUDSTONE	INTERCALATIONS, GREY. SILTSTONE, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, SLOW SLAKING.
67.58	0.08	100		100% MUDSTONE	FINE GRAINED SANDSTONE, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
67.80	0.22	100		60% MUDSTONE 40% MUDSTONE	ARGILLACEOUS, GREY-BROWN. SILTSTONE, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: JOINT AT BASE OF UNIT
68.02	0.22	100		100% SILTSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
68.12	0.10	100		80% MUDSTONE 15% MUDSTONE 5% MUDSTONE	ARGILLACEOUS, COALY, BLACK. BROWN. SILTSTONE, WHITE. UNWEATHERED, WEAK ROCK.
68.19	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
68.20	0.01	100		100% MUDSTONE	ARGILLACEOUS, CARBONACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
68.27	0.07	100		100% SILTSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
68.28	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
68.36	0.08	100		90% COAL, HEAVY DULL 10% MUDSTONE	INTERCALATIONS, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
68.44	0.08	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, RAPID SLAKING.
68.46	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
68.53	0.07	100		75% MUDSTONE 24% CARBONACEOUS MUDSTONE 1% COAL	CARBONACEOUS, BROWN. BROWN-BLACK. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
68.56	0.03	100		89% MUDSTONE 10% SILTSTONE 1% MUDSTONE	LIGHT BROWN. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.67	0.11	100		70% CARBONACEOUS MUDSTONE 30% SILTSTONE	BROWN-BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
68.72	0.05	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 78 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.74	0.02	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
68.84	0.10	100		80% SANDSTONE 10% CARBONACEOUS MUDSTONE 10% MUDSTONE	MED.-FINE GRAINED, GREY-BROWN. BANDS, BROWN-BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.01	0.17	100		95% COAL, DULL 5% SILTSTONE	BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.11	0.10	100		100% MUDSTONE	COALY, LENSES, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
69.22	0.11	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	COALY, LENSES, BROWN-BLACK. CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
69.33	0.11	100		98% MUDSTONE 2% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN. ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.57	0.24	100		90% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% MUDSTONE	BLACK. STREAKS, LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
69.62	0.05	100		75% CARBONACEOUS MUDSTONE 25% COAL	BROWN-BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
69.65	0.03	100		85% MUDSTONE 15% COAL	BROWN. PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
69.76	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
69.80	0.04	100		70% SILTSTONE 30% CARBONACEOUS MUDSTONE	SANDSTONE, LIGHT BROWN. BANDS, PELLETAL, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
69.89	0.09	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.09	0.20	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN. ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.16	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.20	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
70.30	0.10	100		90% COAL, DULL 10% MUDSTONE	BLACK. SILTSTONE, BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
70.36	0.06	100		70% COAL, HEAVY DULL 30% MUDSTONE	BLACK. SILTSTONE, BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
70.43	0.07	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
70.50	0.07	100		99% COAL, HEAVY DULL 1% SILTSTONE	BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.53	0.03	100		70% COAL, HEAVY DULL 30% MUDSTONE	BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.74	0.21	100		99% COAL, HEAVY DULL 1% SANDSTONE,FINE GRAINED	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.79	0.05	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	BANDS, GREY-BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
70.83	0.04	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK.
70.90	0.07	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.99	0.09	100		90% TONSTEIN 10% COAL	CREAM. STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
71.04	0.05	100		100% MUDSTONE	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
71.16	0.12	100		100% TONSTEIN	CREAM, UNWEATHERED, WEAK ROCK.
71.18	0.02	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
71.25	0.07	100		90% CARBONACEOUS MUDSTONE 10% SILTSTONE	BROWN-BLACK. LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
71.27	0.02	100		100% SILTSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
71.33	0.06	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
71.41	0.08	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
71.47	0.06	100		80% MUDSTONE 20% COAL	ARGILLACEOUS, BROWN. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
71.60	0.13	100		90% COAL, HEAVY DULL 10% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
71.61	0.01	100		100% MUDSTONE	CARBONACEOUS, PELLETAL, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
71.63	0.02	100		100% SILTSTONE	CARBONACEOUS, LENSES, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
71.65	0.02	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRAGMENTS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
71.78	0.13	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 78 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
71.81	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 78 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
71.89	0.08	100		60% MUDSTONE 25% MUDSTONE 15% COAL	GREY-BROWN. CARBONACEOUS, FRAGMENTS, BROWN. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
72.16	0.27	100		100% MUDSTONE	COALY, FRAGMENTS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
72.52	0.36	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
72.58	0.06	100		60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 40% MUDSTONE	BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
72.59	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.77	0.18	100		98% COAL, DULL WITH NUMEROUS BRIGHT BANDS 2% SILTSTONE	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.78	0.01	100		100% SILTSTONE	BANDS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
72.80	0.02	100		80% MUDSTONE 20% COAL, DULL	FRAGMENTS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
72.84	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.88	0.04	100		70% MUDSTONE 20% COAL 10% MUDSTONE	CARBONACEOUS, DARK BROWN. BANDS, BLACK. LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
72.97	0.09	100		90% SILTSTONE 10% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
72.99	0.02	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	CALCAREOUS, WHITE. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
73.13	0.14	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
73.14	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.32	0.18	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.33	0.01	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	BROWN-BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
73.36	0.03	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
73.51	0.15	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BLACK. PELLETAL, FRAGMENTS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
73.52	0.01	100		100% SILTSTONE	MUDSTONE, PELLETAL, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
73.55	0.03	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
73.58	0.03	100		85% SILTSTONE 10% CARBONACEOUS MUDSTONE 5% MUDSTONE	WHITE. BLACK. PELLETAL, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
73.62	0.04	100		80% CARBONACEOUS MUDSTONE 15% SILTSTONE 5% MUDSTONE	BROWN-BLACK. GREY-BROWN. FRAGMENTS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
73.97	0.35	100		90% SILTSTONE 10% MUDSTONE	ARGILLACEOUS, WHITE. COALY, FRAGMENTS, WHITE. UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
74.06	0.09	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
74.13	0.07	100		100% SILTSTONE	CREAM, UNWEATHERED, WEAK ROCK.
74.17	0.04	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
74.19	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.24	0.05	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
74.26	0.02	100		100% SILTSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
74.35	0.09	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.38	0.03	100		95% SANDSTONE 5% COAL	FINE GRAINED, GREY. LUSTROUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.60	0.22	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.65	0.05	100		60% COAL, HEAVY DULL 35% SANDSTONE,FINE GRAINED 5% MUDSTONE	BLACK. ARKOSIC, WHITE. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
74.71	0.06	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.73	0.02	100		100% SANDSTONE,FINE GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
74.80	0.07	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING.
74.83	0.03	100		60% SILTSTONE 40% MUDSTONE	COALY, LAMINAE, DARK GREY. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
74.90	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.95	0.05	100		90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
74.97	0.02	100		100% SANDSTONE,FINE GRAINED	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.04	0.07	100		75% COAL, HEAVY DULL 20% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.12	0.08	100		85% MUDSTONE 15% CARBONACEOUS SHALE	CREAM. STREAKS, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.17	0.05	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	COALY, LENSES, BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
75.19	0.02	100		100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
75.25	0.06	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, INTERCALATIONS, DARK BROWN. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
75.28	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
75.31	0.03	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	BROWN-BLACK. BANDS, LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.48	0.17	100		99% COAL, HEAVY DULL 1% MUDSTONE	BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.59	0.11	100		100% MUDSTONE	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
75.65	0.06	100		100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
75.72	0.07	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
75.74	0.02	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
75.78	0.04	100		100% MUDSTONE	SILTSTONE, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.81	0.03	100		55% MUDSTONE 45% COAL	ARGILLACEOUS, LIGHT BROWN. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
75.91	0.10	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.94	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.00	0.06	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.05	0.05	100		60% COAL, HEAVY DULL 40% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
76.10	0.05	100		85% MUDSTONE 10% COAL 5% MUDSTONE	GREY-BROWN. FRAGMENTS, STREAKS, BLACK. FRAGMENTS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.13	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.15	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.18	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.20	0.02	100		100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.25	0.05	100		40% MUDSTONE 40% MUDSTONE 20% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, CREAM. DARK BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.37	0.12	100		100% MUDSTONE	COALY, FRAGMENTS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
76.40	0.03	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS.
76.42	0.02	100		50% COAL, HEAVY DULL 40% MUDSTONE 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, BLACK. BANDS, LIGHT BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
76.44	0.02	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
76.51	0.07	100		90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
76.59	0.08	100		80% CARBONACEOUS MUDSTONE 20% SILTSTONE	COALY, STREAKS, BROWN-BLACK. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
76.65	0.06	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.79	0.14	100		90% SILTSTONE 10% CARBONACEOUS MUDSTONE	MUDSTONE, PELLETAL, GREY-BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
76.93	0.14	100		80% COAL, DULL 20% MUDSTONE	BLACK. SILTSTONE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
76.94	0.01	100		90% MUDSTONE 10% COAL, DULL	BANDS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
76.97	0.03	100		95% COAL, DULL 5% SANDSTONE,FINE GRAINED	BLACK. ARKOSIC, WHITE. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
77.01	0.04	100		75% SANDSTONE,FINE GRAINED 25% COAL	BROWN. FRAGMENTS, PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
77.19	0.18	100		90% COAL, DULL WITH FEW BRIGHT BANDS 10% CARBONACEOUS MUDSTONE	BLACK. LENSES, BROWN-BLACK. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.21	0.02	100		100% MUDSTONE	COALY, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
77.35	0.14	100		95% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% MUDSTONE	BLACK. LENSES, GREY. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
77.38	0.03	100		40% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE 20% MUDSTONE	ARKOSIC, WHITE. BROWN-BLACK. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
77.44	0.06	100		100% SILTSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
77.49	0.05	100		40% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL 20% MUDSTONE	BANDS, BROWN-BLACK. BANDS, BLACK. STREAKS, LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
77.50	0.01	100		100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
77.59	0.09	100		75% COAL, DULL 25% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
77.64	0.05	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.67	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 79 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.78	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.87	0.09	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.90	0.03	100		90% MUDSTONE 10% MUDSTONE	CREAM. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.92	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.93	0.01	100		100% SILTSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
77.94	0.01	100		100% CARBONACEOUS MUDSTONE	UNWEATHERED, MODERATELY WEAK ROCK.
77.98	0.04	100		75% MUDSTONE 25% MUDSTONE	COALY, STREAKS, GREY. CALCAREOUS, FRAGMENTS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
78.04	0.06	100		90% COAL, DULL WITH FEW BRIGHT BANDS 10% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
78.10	0.06	100		85% MUDSTONE 12% COAL 3% MUDSTONE	DARK BROWN. BANDS, PELLETAL, BLACK. PELLETAL, YELLOW-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
78.14	0.04	100		90% COAL, HEAVY DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.15	0.01	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	COALY, STREAKS, GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
78.19	0.04	100		90% MUDSTONE 10% MUDSTONE	CREAM. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
78.35	0.16	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY-BROWN. COALY, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.38	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
78.43	0.05	100		90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
78.47	0.04	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	MUDSTONE, FRAGMENTS, LIGHT GREEN. RADIOACTIVE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
78.49	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
78.56	0.07	100		94% MUDSTONE 5% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
78.63	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
78.66	0.03	100		100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
78.69	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
78.72	0.03	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	PELLETAL, LENSES, BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
78.78	0.06	100		99% CARBONACEOUS MUDSTONE 1% MUDSTONE	COALY, BROWN-BLACK. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
78.88	0.10	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
78.93	0.05	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING.
79.00	0.07	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK BROWN. BROWN-BLACK. WITH VIVIANITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.04	0.04	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
79.08	0.04	100		100% COAL, HEAVY DULL	MUDSTONE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.14	0.06	100		100% MUDSTONE	CALCAREOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
79.17	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.27	0.10	100		100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
79.34	0.07	100		100% COAL, DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
79.48	0.14	100		80% CARBONACEOUS MUDSTONE 19% COAL, BRIGHT 1% MUDSTONE	BLACK. BANDS, BLACK. BANDS, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 84 DEG., INFILLED WITH CALCITE.
79.52	0.04	100		70% CARBONACEOUS MUDSTONE 20% MUDSTONE 10% COAL	BROWN-BLACK. LENSES, STREAKS, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 84 DEG., INFILLED WITH CALCITE.
79.55	0.03	100		100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
79.61	0.06	100		70% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT 10% MUDSTONE	BROWN-BLACK. BANDS, BLACK. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
79.96	0.35	100		60% MUDSTONE 40% SILTSTONE	BANDS, INTERCALATIONS, DARK BROWN. BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
81.18	1.22	100		99% MUDSTONE 1% LIMESTONE	SILTSTONE, GREY. FRAGMENTS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
81.24	0.06	100		60% SILTSTONE 40% MUDSTONE	LAMINAE, INTERCALATIONS, GREY. LAMINAE, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
81.38	0.14	100		70% SILTSTONE 30% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
81.47	0.09	100		100% MUDSTONE	GRADING TO, CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
81.52	0.0[illegible]	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
82.63	1.11	100		99% MUDSTONE 1% COAL	SILTSTONE, FOSSILIFERROUS, GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.77	0.14	100		100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
82.93	0.16	100		48% MUDSTONE 48% MUDSTONE 4% COAL	GREY-BROWN. CARBONACEOUS, BROWN. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
83.42	0.49	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.67	0.25	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
84.07	0.40	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	SILTSTONE, LAMINAE, GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
84.10	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
84.24	0.14	100		100% MUDSTONE	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
84.30	0.06	100		100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
84.73	0.43	100		98% MUDSTONE 2% SILTSTONE	CARBONACEOUS, LAMINAE, GREY-BROWN. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
84.79	0.06	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	CREAM. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
84.82	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
84.88	0.06	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
85.33	0.45	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.36	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
85.57	0.21	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.69	0.12	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	BROWN-BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CROSS LAMINATION.
85.74	0.05	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	SILTSTONE, GREY-BROWN. BANDS, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
85.79	0.05	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	BROWN-BLACK. STREAKS, LENSES, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
86.01	0.22	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
86.85	0.84	100		70% SILTSTONE 30% SILTSTONE	CARBONACEOUS, LAMINAE, BROWN-BLACK. LENSES, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
86.89	0.04	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	LAMINAE, BROWN-BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
87.16	0.27	100		60% CARBONACEOUS MUDSTONE 35% SANDSTONE 5% MUDSTONE	BANDS, INTERCALATIONS, BROWN-BLACK. MED.-FINE GRAINED, CALCAREOUS, WHITE. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH DISTURBED BEDDING.
87.23	0.07	100		70% MUDSTONE 20% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. BROWN-BLACK. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
87.29	0.06	100		100% MUDSTONE	COALY, LENSES, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
				TOP OF MT. NICHOLAS UPPER 8 : 471.79 M R.L.	
87.41	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.49	0.08	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.53	0.04	100		70% CARBONACEOUS MUDSTONE 30% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
87.64	0.11	100		50% COAL, DULL 25% CARBONACEOUS MUDSTONE 25% SANDSTONE	LUSTROUS, BANDS, BLACK. BANDS, BROWN-BLACK. MED.-FINE GRAINED, ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
87.65	0.01	100		100% MUDSTONE	BANDS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
87.80	0.15	100		99% COAL, DULL 1% MUDSTONE	BLACK. BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
88.01	0.21	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.72 M; SAMPLED THICKNESS= 0.00 M	
88.14	0.13	100		99% MUDSTONE 1% MUDSTONE	DARK GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
88.33	0.19	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
88.36	0.03	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
88.54	0.18	100		100% SILTSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
88.77	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
88.89	0.12	100		60% MUDSTONE 30% MUDSTONE 10% CARBONACEOUS MUDSTONE	ARGILLACEOUS, GREY-BROWN. GREY. LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
88.96	0.07	100		75% CARBONACEOUS MUDSTONE 25% COAL	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
88.99	0.03	100		90% COAL, BRIGHT 10% CARBONACEOUS MUDSTONE	BANDS, BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
89.08	0.09	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
89.61	0.53	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.73	0.12	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
90.07	0.34	100		95% MUDSTONE 5% SILTSTONE	GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.29	0.22	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
90.34	0.05	100		95% SILTSTONE 5% MUDSTONE	CALCAREOUS, WHITE. LENSES. UNWEATHERED, MODERATELY WEAK ROCK.
90.36	0.02	100		85% MUDSTONE 15% SILTSTONE	DARK GREY. CALCAREOUS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, WITH RIPPLES.
90.42	0.06	100		75% SILTSTONE 25% MUDSTONE	CALCAREOUS, WHITE. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH RIPPLES.
90.50	0.08	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH RIPPLES.
90.88	0.38	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
91.09	0.21	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
91.19	0.10	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
91.44	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
91.68	0.24	100		70% SILTSTONE 20% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY. SILTSTONE, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
91.80	0.12	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
92.09	0.29	100		80% SILTSTONE 15% MUDSTONE 5% SANDSTONE,FINE GRAINED	LAMINAE, GREY. GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
92.60	0.51	100		95% MUDSTONE 5% SILTSTONE	LAMINAE, DARK GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH RIPPLES, WITH CROSS LAMINATION.
92.72	0.12	100		90% CARBONACEOUS MUDSTONE 10% SILTSTONE	LAMINAE, BROWN-BLACK. LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
92.77	0.05	100		40% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE 20% MUDSTONE	ARKOSIC, INTERCALATIONS, LIGHT GREY. BANDS, LUSTROUS, BROWN-BLACK. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
93.03	0.26	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
93.37	0.34	100		95% MUDSTONE 5% MUDSTONE	CARBONACEOUS, FOSSILIFERROUS, DARK GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
94.26	0.89	100		60% MUDSTONE 40% MUDSTONE	LAMINAE, INTERCALATIONS, DARK GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
94.35	0.09	100		70% MUDSTONE 30% MUDSTONE	LENSES, BANDS, GREY. LAMINAE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
94.41	0.06	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
94.56	0.15	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
94.88	0.32	100		98% MUDSTONE 2% MUDSTONE	CARBONACEOUS, GREY-BROWN. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
95.16	0.28	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
95.32	0.16	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
95.41	0.09	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: SAME STRIKE BUT OPPOSITE DIP TO ABOVE JOINTS
95.86	0.45	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: SAME STRIKE BUT OPPOSITE DIP TO ABOVE JOINTS
95.91	0.05	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY-BROWN. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
96.02	0.11	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
96.07	0.05	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	COALY, LENSES, BROWN-BLACK. CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
96.21	0.14	100		100% MUDSTONE	CARBONACEOUS, LENSES, CREAM, UNWEATHERED, WEAK ROCK.
96.29	0.08	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
96.66	0.37	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,FINE GRAINED	BANDS, BROWN-BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
97.07	0.41	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK. ARKOSIC, BANDS, WHITE. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG.
97.31	0.24	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE	CARBONACEOUS, BROWN-BLACK. MED.-FINE GRAINED, BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
97.44	0.13	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 28 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
97.54	0.10	100		80% SANDSTONE,FINE GRAINED 10% COAL 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BANDS, LENSES, BLACK. LENSES, PELLETAL, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
97.60	0.06	100		50% SILTSTONE 50% CARBONACEOUS MUDSTONE	GREY. COALY, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
97.64	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.68	0.04	100		100% SILTSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
98.01	0.33	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
98.08	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: STRIKE OF JOINTS DIFFERS BY ABOUT 90 DEG
98.69	0.61	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
98.90	0.21	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
99.04	0.14	100		80% SHEAR/FAULT ZONE 20% CLAY	BRECCIATED, SILTSTONE, GREY. GREY. UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
99.11	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
99.76	0.65	100		100% MUDSTONE	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: SAME STRIKE BUT OPPOSITE DIP DIRECTION
99.96	0.20	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 15 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
99.99	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.51	0.52	100		98% CARBONACEOUS MUDSTONE 2% MUDSTONE	BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
100.52	0.01	100		100% MUDSTONE	WHITE, UNWEATHERED, WEAK ROCK.
100.56	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
100.65	0.09	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
100.72	0.07	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
101.05	0.33	100		98% SILTSTONE 2% MUDSTONE	CARBONACEOUS, DARK BROWN. LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: FAULT CONTACT AT BASE OF UNIT,ASSOCIATED WITH JOINTS
101.35	0.30	100		50% CARBONACEOUS MUDSTONE 30% SANDSTONE,FINE GRAINED 20% MUDSTONE	BANDS, BROWN-BLACK. BANDS, LENSES, WHITE. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
101.47	0.12	100		70% MUDSTONE 20% SANDSTONE,MEDIUM GRAINED 10% COAL	PELLETAL, LUSTROUS, RED-BROWN. ARKOSIC, CREAM. LUSTROUS, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
101.52	0.05	100		40% CARBONACEOUS MUDSTONE 40% PYRITE 20% COAL, BRIGHT	LENSES, BROWN-BLACK. LENSES, YELLOW. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
101.55	0.03	100		70% MUDSTONE 20% CARBONACEOUS MUDSTONE 10% COAL	PELLETAL, RED-BROWN. RESINOUS, BANDS, BROWN-BLACK. LUSTROUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
101.56	0.01	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
101.98	0.42	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
102.01	0.03	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
102.51	0.50	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 48 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.96	0.45	100		80% SILTSTONE 20% MUDSTONE	INTERCALATIONS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
103.78	0.82	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LAMINAE, LIGHT GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
103.85	0.07	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
104.35	0.50	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
104.97	0.62	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	LAMINAE, INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH RIPPLES.
105.08	0.11	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
105.10	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.18	0.08	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
105.25	0.07	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	GREY. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: JOINT AT BASE OF UNIT POSSIBLY A FAULT
105.72	0.47	100		65% SANDSTONE 35% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
105.88	0.16	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
106.54	0.66	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
106.84	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
109.11	2.27	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
109.47	0.36	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
110.27	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.94	0.67	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
111.02	0.08	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
111.06	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
111.10	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
111.41	0.31	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG.
111.56	0.15	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK. NOTE: UPPER CONTACT OF FAULT ZONE LOWER CONTACT OF FAULT ZONE
111.61	0.05	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK.
111.73	0.12	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 25 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
111.87	0.14	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
112.03	0.16	100		75% SANDSTONE 25% COAL	MED.-FINE GRAINED, LIGHT GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
112.04	0.01	100		80% SANDSTONE,COARSE GRAINED 20% MUDSTONE	ARKOSIC, WHITE. DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
112.06	0.02	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
112.12	0.06	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
112.15	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
112.20	0.05	100		100% MUDSTONE	BADLY BROKEN, GREY-BROWN, UNWEATHERED, WEAK ROCK.
112.32	0.12	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
112.43	0.11	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
112.51	0.08	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.
112.53	0.02	100		100% MUDSTONE	LENSES, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
112.58	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
112.63	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
112.69	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.68	0.99	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.77	0.09	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	BADLY BROKEN, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
113.79	0.02	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.95	0.16	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.43	1.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.75	0.32	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
115.77	0.02	100		75% COAL 25% SANDSTONE,MEDIUM GRAINED	LAMINAE, LENSES, BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
116.07	0.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
117.00	0.93	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
117.24	0.24	100		84% SANDSTONE 15% SILTSTONE 1% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. CARBONACEOUS, PELLETAL, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
117.42	0.18	100		65% SILTSTONE 30% SANDSTONE 5% SANDSTONE,FINE GRAINED	LUSTROUS, PELLETAL, GREY. MED.-COARSE GRAINED, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.61	0.19	100		95% MUDSTONE 5% MUDSTONE	GREY. CARBONACEOUS, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
117.90	0.29	100		80% SILTSTONE 20% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
117.95	0.05	100		75% SANDSTONE 15% MUDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, GREY. CARBONACEOUS, PELLETAL, GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
118.78	0.83	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
118.93	0.15	100	43T01	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
119.03	0.10	100		60% SANDSTONE 35% SILTSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
119.10	0.07	100		85% SILTSTONE 10% SANDSTONE 5% COAL	GREY-BROWN. MED.-COARSE GRAINED, LENSES, LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
119.21	0.11	100		100% SILTSTONE	COALY, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
119.22	0.01	100		100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
119.36	0.14	100	43T02	100% SANDSTONE,FINE GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
119.42	0.06	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				TOP OF MT. NICHOLAS MIDDLE 1 : 439.66 M R.L.	
119.43	0.01	100	43A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.46	0.03	100	43A03	70% CARBONACEOUS MUDSTONE 30% COAL, BRIGHT	INTERCALATIONS, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
119.58	0.12	100	43A03	99% COAL, MID LUSTROUS 1% CARBONACEOUS SHALE	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.59	0.01	100	43A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.70	0.11	100	43A03	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.74	0.04	100	43A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.80	0.06	100	43A03	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.82	0.02	100	43A03	80% COAL, HEAVY DULL 20% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.93	0.11	100	43A03	100% SILTSTONE	ARGILLACEOUS, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.95	0.02	100	43A03	100% MUDSTONE	SILTSTONE, CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
119.97	0.02	100	43A03	100% SANDSTONE,FINE GRAINED	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
119.98	0.01	100	43A04	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
120.14	0.16	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
120.16	0.02	100	43A04	100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 3 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
120.17	0.01	100	43A04	100% CLAYSTONE	RESINOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
120.20	0.03	100	43A04	100% CLAYSTONE	CREAM, UNWEATHERED, FIRM, SLOW SLAKING, MODERATELY STICKY.
120.29	0.09	100	43A04	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
120.32	0.03	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
120.44	0.12	100	43A04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
120.46	0.02	100	43A04	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLOW SLAKING, NON STICKY.
120.48	0.02	100	43A04	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
120.50	0.02	100	43A04	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLOW SLAKING, NON STICKY.
120.52	0.02	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
120.53	0.01	100	43A04	80% MUDSTONE 20% COAL, DULL	LIGHT BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 20 DEG., NON SLAKING, NON STICKY.
120.73	0.20	100	43A04	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
120.90	0.17	100	43A04	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.08	0.18	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.16	0.08	100	43A04	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.24	0.08	100	43A04	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.28	0.04	100	43A04	80% COAL, BRIGHT 20% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.43	0.15	100	43A04	100% COAL, DULL	EARTHY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.44	0.01	100	43A04	100% CARBONACEOUS MUDSTONE	BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.49	0.05	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
121.65	0.16	100	43A04	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.67	0.02	100	43A04	70% MUDSTONE 30% COAL	CARBONACEOUS, INTERCALATIONS, DARK BROWN. STREAKS, RESINOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
121.74	0.07	100	43A04	100% COAL, MID LUSTROUS - DULL	EARTHY, RESINOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.76	0.02	100	43A04	70% MUDSTONE 30% COAL	CARBONACEOUS, BANDS, BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
121.84	0.08	100	43A04	100% COAL, MID LUSTROUS - DULL	EARTHY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.97	0.13	100	43A04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
121.98	0.01	100	43A04	70% COAL, MID LUSTROUS 30% MUDSTONE	BLACK. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
				NOTE: OPPOSITE DIP TO ABOVE JOINT	
122.07	0.09	100	43A04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				NOTE: ONE CM DISPLACEMENT	
122.30	0.23	100	43A04	100% COAL, DULL	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
122.40	0.10	100	43A04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
122.44	0.04	100	43A04	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
122.47	0.03	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
122.51	0.04	100	43A04	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
122.56	0.05	100	43A04	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
122.61	0.05	100	43A04	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.71	0.10	100	43A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 3.29 M; SAMPLED THICKNESS= 3.29 M	
122.73	0.02	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.81	0.08	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
122.95	0.14	100	43T03	100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.08	0.13	100	43T04	100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.48	0.40	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.63	0.15	100	43T05	100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.86	0.23	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.99	0.13	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	LAMINAE, GREY-BROWN. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
124.13	0.14	100		100% SANDSTONE,FINE GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.33	0.20	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	LAMINAE, BANDS, GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
124.43	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.46	0.03	100		100% SILTSTONE	ARENACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.92	0.46	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
125.13	0.21	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.43	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.49	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.51	0.02	100		60% SILTSTONE 40% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.55	1.04	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
127.50	0.95	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
128.13	0.63	100		70% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK.
130.17	2.04	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS.
130.52	0.35	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
130.79	0.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
132.36	1.57	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH MUD PELLETS.
133.05	0.69	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
133.43	0.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
133.73	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
134.96	1.23	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
135.73	0.77	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
136.08	0.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
136.69	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
136.82	0.13	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
137.17	0.35	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS.
137.60	0.43	100		99% SANDSTONE,MEDIUM GRAINED 1% MUDSTONE	LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
138.02	0.42	100		70% SANDSTONE,MEDIUM GRAINED 29% SANDSTONE,FINE GRAINED 1% MUDSTONE	INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
138.31	0.29	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
138.74	0.43	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
139.37	0.63	100		80% SANDSTONE 15% MUDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 20 DEG.
140.54	1.17	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
140.76	0.22	100		80% SANDSTONE,COARSE GRAINED 15% COAL 5% MUDSTONE	LIGHT GREY. LENSES, FRAGMENTS, BLACK. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
141.06	0.30	100		50% SILTSTONE 25% SANDSTONE,FINE GRAINED 25% MUDSTONE	BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH DISTURBED BEDDING, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
141.35	0.29	100		75% MUDSTONE 20% COAL 5% MUDSTONE	CARBONACEOUS, BROWN. FRAGMENTS, LENSES, BLACK. FRAGMENTS, LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
141.47	0.12	100		80% MUDSTONE 15% MUDSTONE 5% COAL	SILTSTONE, GREY. CARBONACEOUS, LENSES, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
141.52	0.05	100		90% MUDSTONE 10% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
141.71	0.19	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
141.87	0.16	100		75% SANDSTONE 25% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.17	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 7 DEG.
142.38	0.21	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	LAMINAE, INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL.
142.79	0.41	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.81	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
142.82	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 416.26 M R.L.	
143.09	0.27	100		99% COAL, HEAVY DULL 1% CARBONACEOUS SHALE	BLACK. MUDSTONE, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
143.16	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, LENSES, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.25	0.09	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLOW SLAKING.
143.54	0.29	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= .2 M; SAMPLED THICKNESS= 0.00 M	
143.65	0.11	100		80% CARBONACEOUS MUDSTONE 15% MUDSTONE 5% SILTSTONE	COALY, FRAGMENTS, BROWN-BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
143.69	0.04	100		90% MUDSTONE 10% COAL	CARBONACEOUS, DARK BROWN. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.72	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
143.74	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK.
143.81	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.97	0.16	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
				NOTE: JOINT AT BASE OF UNIT	
144.11	0.14	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK BROWN. LENSES, PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
145.58	1.47	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS.
145.75	0.17	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
146.90	1.15	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
147.73	0.83	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, MASSIVE. UNWEATHERED, MODERATELY WEAK ROCK.
				NOTE: JOINT WITHIN MUDSTONE FRAGMENT	
148.76	1.03	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 25 DEG.
150.47	1.71	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
151.21	0.74	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
151.32	0.11	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
151.63	0.31	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
152.52	0.89	100		99% SANDSTONE 1% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
154.10	1.58	100		99% SANDSTONE,MEDIUM GRAINED 1% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
154.31	0.21	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
154.49	0.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
154.50	0.01	100		100% SANDSTONE,FINE GRAINED	BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
154.70	0.20	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
156.66	1.96	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
157.48	0.82	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
157.51	0.03	100		60% CARBONACEOUS MUDSTONE 40% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
157.58	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
157.61	0.03	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
157.62	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
157.64	0.02	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CREAM. STREAKS, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
157.81	0.17	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, LENSES, BROWN-BLACK. BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
157.84	0.03	100		99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
157.97	0.13	100		80% SILTSTONE 20% MUDSTONE	LAMINAE, DARK GREY. COALY, STREAKS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
158.04	0.07	100		100% MUDSTONE	FRAGMENTS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 37 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
159.28	1.24	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
159.52	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
159.58	0.06	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.05	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
160.13	0.08	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.23	0.10	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.28	0.05	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
160.34	0.06	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
160.97	0.63	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
161.61	0.64	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 15 DEG.
161.67	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
161.86	0.19	100		100% SANDSTONE,FINE GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
161.88	0.02	100		100% SANDSTONE,FINE GRAINED	UNWEATHERED, MODERATELY WEAK ROCK.
163.09	1.21	100		98% SANDSTONE 1% CARBONACEOUS SHALE 1% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. LAMINAE, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
163.26	0.17	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
163.32	0.06	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
163.34	0.02	100		100% SANDSTONE	MED.-COARSE GRAINED, LIMONITIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
165.56	2.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
166.18	0.62	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
166.66	0.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 25 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS. NOTE: JOINT AT BASE OF UNIT,PROBABLY SMALL FAULT
167.32	0.66	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 10 DEG.
168.19	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
168.86	0.67	100		99% SANDSTONE 1% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
169.57	0.71	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, SCREE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
169.99	0.42	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
170.45	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
170.96	0.51	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
171.48	0.52	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
171.72	0.24	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
175.53	3.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
175.87	0.34	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.54	0.67	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.85	0.31	100		100% SANDSTONE,FINE GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.95	0.10	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
177.26	0.31	100		75% SANDSTONE 24% COAL, HEAVY DULL 1% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
177.51	0.25	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.81	0.30	100		60% SANDSTONE 30% CARBONACEOUS MUDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, LIMONITIC, LIGHT GREY. FRAGMENTS, LENSES, BROWN-BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG.
178.58	0.77	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
179.41	0.83	100		65% SANDSTONE 35% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
180.90	1.49	100		85% SANDSTONE 15% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, LIGHT GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
181.58	0.68	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
181.77	0.19	100		100% SANDSTONE	MED.-COARSE GRAINED, STAINING, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
181.81	0.04	100		95% COAL, HEAVY DULL 5% SANDSTONE,MEDIUM GRAINED	BANDS, BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
181.91	0.10	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	BANDS, STAINING, LIGHT GREY. LUSTROUS. UNWEATHERED, MODERATELY WEAK ROCK.
182.25	0.34	100		90% SANDSTONE 5% COAL 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 30 DEG.
182.88	0.63	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
183.58	0.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
183.81	0.23	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
184.00	0.19	100		90% SANDSTONE,MEDIUM GRAINED 10% PYRITE	ARGILLACEOUS, BADLY BROKEN, LIGHT GREY. NODULES, YELLOW-BROWN. WITH ZEOLITE ON JOINTS, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
184.47	0.47	100		100% SANDSTONE,MEDIUM GRAINED	WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
185.43	0.96	100		100% SANDSTONE,MEDIUM GRAINED	WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
185.46	0.03	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
185.52	0.06	100		70% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, WHITE. LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 50 DEG., WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
186.43	0.91	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
186.56	0.13	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LIGHT GREY. FRAGMENTS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
186.61	0.05	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. FRAGMENTS, GREY. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
187.11	0.50	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
187.12	0.01	100		100% SILTSTONE	VERY FINE GRAINED, BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
187.28	0.16	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
187.40	0.12	100		70% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
188.07	0.67	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
188.38	0.31	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
188.85	0.47	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
189.59	0.74	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
189.66	0.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
190.27	0.61	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
190.63	0.36	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS.
191.73	1.10	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
192.14	0.41	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
192.22	0.08	100		90% SILTSTONE 10% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS.
					NOTE: JOINTS WITH SAME STRIKE TO ABOVE,BUT OPPOSITE DIP
192.43	0.21	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
					NOTE: TWO SIMILAR SETS OF JOINTS WITH OPPOSITE DIP DIRECTIONS
192.91	0.48	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
193.63	0.72	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
					NOTE: TWO LITHOLOGIES SEPARATED BY JOINT
196.54	2.91	100		99% SANDSTONE,MEDIUM GRAINED 1% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
196.84	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
198.40	1.56	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
198.89	0.49	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
199.18	0.29	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
199.30	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
200.61	1.31	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
201.02	0.41	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
202.01	0.99	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
202.20	0.19	100		90% MUDSTONE 10% MUDSTONE	GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.24	0.04	100		60% CARBONACEOUS MUDSTONE 30% MUDSTONE 10% MUDSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
202.34	0.10	100		80% MUDSTONE 15% MUDSTONE 5% SANDSTONE,FINE GRAINED	GREY. CARBONACEOUS, STREAKS, DARK BROWN. ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
202.47	0.13	100		80% SILTSTONE 20% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
202.70	0.23	100		80% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 10% MUDSTONE	GREY. CARBONACEOUS, STREAKS, BROWN-BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
203.89	1.19	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
203.90	0.01	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
204.00	0.10	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
205.17	1.17	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.75	1.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
206.85	0.10	100		80% SANDSTONE,MEDIUM GRAINED 15% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
208.37	1.52	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
208.52	0.15	100		70% SANDSTONE,FINE GRAINED 30% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
208.82	0.30	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED BEDS DIP 3 DEG.
209.00	0.18	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	COALY, STREAKS, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
209.35	0.35	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
209.40	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
209.66	0.26	100		100% SANDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
209.97	0.31	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, CARBONACEOUS, BROWN-BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON STICKY.
210.62	0.65	100		75% SANDSTONE 25% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, CARBONACEOUS, BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., NON STICKY.
210.72	0.10	100		85% SANDSTONE,FINE GRAINED 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON STICKY.
210.86	0.14	100	43T06	85% SANDSTONE,FINE GRAINED 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON STICKY.
210.88	0.02	100		85% SANDSTONE,FINE GRAINED 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
210.89	0.01	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
211.04	0.15	100	43T07	100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
211.30	0.26	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
211.73	0.43	100	43A01	100% CARBONACEOUS MUDSTONE	MUDSTONE, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
212.41	0.68	100	43A01	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				NOTE: SLICKENSIDES AT VARIOUS ORIENTATIONS	
				TOP OF MT. NICHOLAS LOWER 1 : 346.67 M R.L.	
212.88	0.47	100	43A02	100% COAL, DULL	EARTHY, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
212.93	0.05	100	43A02	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.02	0.09	100	43A02	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
213.43	0.41	100	43A02	100% COAL, DULL	EARTHY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.48	0.05	100	43A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
213.59	0.11	100	43A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.66	0.07	100	43A02	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.67	0.01	100	43A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
213.78	0.11	100	43A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.81	0.03	100	43A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.85	0.04	100	43A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
213.86	0.01	100	43A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.02	0.16	100	43A02	100% SHALE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
214.05	0.03	100	43A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.11	0.06	100	43A02	85% COAL, MID LUSTROUS - BRIGHT 15% COAL, MID LUSTROUS - DULL	BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
214.14	0.03	100	43A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
214.17	0.03	100	43A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
214.19	0.02	100	43A02	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.78 M; SAMPLED THICKNESS= 1.78 M	
214.30	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
214.65	0.35	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, , NON STICKY.
215.48	0.83	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	SILTSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 12 DEG., WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
217.45	1.97	100		100% MUDSTONE	MASSIVE, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON STICKY. NOTE: JOINTING MATURE VARIABLE
217.50	0.05	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, WITH BANDS OF CALCITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., NON STICKY.
218.30	0.80	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
218.31	0.01	100		100% SHEAR/FAULT ZONE	UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY.
220.18	1.87	100		100% DOLERITE	VERY FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON STICKY. NOTE: COAL BLEBS AT BASE NOT BURNT. 8 CM CHILLED MARGINS
220.36	0.18	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
220.73	0.37	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
221.01	0.28	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
222.17	1.16	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
222.43	0.26	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
223.10	0.67	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.15	1.05	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.80	0.65	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
227.04	2.24	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 14 DEG., WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
227.64	0.60	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LITHIC, INTERCALATIONS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
228.98	1.34	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
229.00	0.02	100		60% CARBONACEOUS MUDSTONE 40% COAL	BLACK. BLACK. WITH LENSES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
229.31	0.31	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
229.53	0.22	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING.
229.68	0.13	100		100% SANDSTONE,FINE GRAINED	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
230.12	0.46	100		100% SANDSTONE	MED.-FINE GRAINED, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
230.23	0.11	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	GREY-BROWN. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: JOINTS PERPENDICULAR TO BEDDING.SLICKENSIDES AT 30 DEG
230.71	0.48	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LITHIC, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: TWO CM DISPLACEMENT
230.83	0.12	100		70% MUDSTONE 30% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
231.03	0.20	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 18 DEG.
231.76	0.73	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
231.91	0.15	100		20% MUDSTONE 20% SILTSTONE	SILTSTONE, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
232.04	0.13	100		80% SANDSTONE,FINE GRAINED 10% MUDSTONE 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 22 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: UPPER AND LOWER CONTACTS FAULTED OPPOSITE TO BEDDING
232.49	0.45	100		80% SANDSTONE,FINE GRAINED 10% MUDSTONE 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 22 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: LOWER CONTACT FAULTED
232.51	0.02	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
232.65	0.14	100		70% SILTSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 23 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE. NOTE: TWO CM DISPLACEMENT
232.85	0.20	100		80% MUDSTONE 20% SILTSTONE	CARBONACEOUS, DARK GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 23 DEG. NOTE: LOWER CONTACT FAULTED AT 20 DEG
233.46	0.61	100		80% SANDSTONE,FINE GRAINED 15% CARBONACEOUS MUDSTONE 5% MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 23 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 72 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: FIVE CM DISPLACEMENT

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
233.51	0.05	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, STIFF, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
233.65	0.14	100		80% COAL, HEAVY DULL 20% CARBONACEOUS MUDSTONE	BLACK. INTERCALATIONS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 35 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
					NOTE: SLICKENSIDES WITH VARIABLE DIRECTIONS AND HIGH POLISH
234.58	0.93	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
234.70	0.12	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., DISCONTINUITIES INFILLED WITH SOIL (<1.
					NOTE: RED CALCITE FLECKS
234.77	0.07	100		100% COAL, HEAVY DULL	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED.
236.87	2.10	100		100% DOLERITE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., DISCONTINUITIES INFILLED WITH SOIL (<1.
237.52	0.65	100		100% DOLERITE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
					NOTE: CHILLED ZONE WITH SHARP IRREGULAR BASE
237.56	0.04	100		100% CARBONACEOUS MUDSTONE	BAKED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 45 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
238.18	0.62	100		100% MUDSTONE	FOSSILIFERROUS, BAKED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 40 DEG.
238.30	0.12	100		100% CLAYSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 40 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	87.29 - 88.01 M	0.72 M
M1	3.29 M	119.42 - 122.71 M	3.29 M
M2	0.00 M	142.82 - 143.54 M	0.72 M
L1	1.78 M	212.41 - 214.19 M	1.78 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
43T01	118.78 - 118.93 M	0.15 M
43T02	119.22 - 119.36 M	0.14 M
43A03	119.42 - 119.97 M	0.55 M
43A04	119.97 - 122.71 M	2.74 M
43T03	122.81 - 122.95 M	0.14 M
43T04	122.95 - 123.08 M	0.13 M
43T05	123.48 - 123.63 M	0.15 M
43T06	210.72 - 210.86 M	0.14 M
43T07	210.89 - 211.04 M	0.15 M
43A01	211.30 - 212.41 M	1.11 M
43A02	212.41 - 214.19 M	1.78 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 44

HOLE TYPE	CORE
EASTING	592,773 M AM GRID
NORTHING	5,401,648 M AM GRID
ELEVATION	506.38 M
TOTAL DEPTH DRILLED	166.86 M
DRILLING STARTED	7/ 5/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.40	0.40			100% SOIL	BLACK, COMPLETELY WEATHERED.
6.00	5.60			100% DOLERITE	SCREE, HIGHLY WEATHERED, VERY WEAK ROCK.
10.14	4.14	30		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT BROWN. YELLOW-BROWN. HIGHLY WEATHERED, VERY WEAK ROCK.
11.06	0.92			80% CARBONACEOUS MUDSTONE 15% MUDSTONE 5% SANDSTONE,FINE GRAINED	INTERCALATIONS, BROWN-BLACK. LAMINAE, LENSES, GREY. LENSES, LAMINAE, LIGHT GREY. WEAK ROCK.
				BASE OF WEATHERING	
11.39	0.33			85% MUDSTONE 10% CARBONACEOUS MUDSTONE 5% SANDSTONE,FINE GRAINED	CARBONACEOUS, INTERCALATIONS. LAMINAE, BROWN-BLACK. LAMINAE, LIGHT GREY. MODERATELY WEAK ROCK.
11.62	0.23			80% CARBONACEOUS MUDSTONE 15% SILTSTONE 5% SANDSTONE,FINE GRAINED	INTERCALATIONS. LAMINAE, LIGHT GREY. COALY, LENSES, LIGHT GREY.
11.86	0.24			60% SILTSTONE 30% CARBONACEOUS MUDSTONE 10% MUDSTONE	INTERCALATIONS, GREY. BROWN-BLACK. PELLETAL, LAMINAE, GREY-BROWN.
11.99	0.13			100% MUDSTONE	SILTSTONE, GREY, WITH CARBONACEOUS WISPS.
12.04	0.05			99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK.
12.27	0.23			100% MUDSTONE	GREY.
12.39	0.12			98% CARBONACEOUS MUDSTONE 2% MUDSTONE	INTERCALATIONS, BROWN-BLACK. BANDS, GREY.
12.69	0.30	50		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	BADLY BROKEN, GREY. BROWN-BLACK.
13.14	0.45			100% MUDSTONE	CARBONACEOUS, GREY-BROWN, VERY WEAK ROCK.
13.23	0.09			100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
13.27	0.04			100% MUDSTONE	CREAM.
13.31	0.04	40		90% MUDSTONE 8% CARBONACEOUS MUDSTONE 2% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED.
13.75	0.44	80		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	LAMINAE, LIGHT GREY. UNWEATHERED, THICKLY LAMINATED, WITH CROSS LAMINATION, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
14.25	0.50	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
14.67	0.42	50		80% MUDSTONE 18% MUDSTONE 2% COAL	INTERCALATIONS, GREY. CARBONACEOUS, BROWN. BANDS, BLACK. UNWEATHERED, WEAK ROCK, SLOW SLAKING.
15.17	0.50	0		CORE LOSS	
16.00	0.83	50		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
16.03	0.03	0		CORE LOSS	
16.27	0.24	100		100% SILTSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION.
16.55	0.28			100% MUDSTONE	GREY, UNWEATHERED, THINLY BEDDED.
16.76	0.21			100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 36 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
17.33	0.57			90% MUDSTONE 10% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, BANDS, BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
17.58	0.25			70% SILTSTONE 28% MUDSTONE 2% SANDSTONE,FINE GRAINED	LAMINAE, INTERCALATIONS, LIGHT GREY. LAMINAE, DARK GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT.
17.88	0.30			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY.
18.46	0.58			90% MUDSTONE 10% SILTSTONE	GREY. LIGHT GREY. UNWEATHERED, WITH DISTURBED BEDDING.
18.54	0.08			95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BROWN-BLACK. LENSES, CREAM. UNWEATHERED, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
18.62	0.08			75% CARBONACEOUS MUDSTONE 25% SANDSTONE,FINE GRAINED	LAMINAE, INTERCALATIONS, BROWN-BLACK. ARKOSIC, LAMINAE, CREAM. UNWEATHERED, THICKLY LAMINATED, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
18.64	0.02			80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	ARKOSIC, CREAM. BROWN-BLACK. UNWEATHERED.
18.72	0.06			100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
18.78	0.06			90% CARBONACEOUS MUDSTONE 10% COAL, HEAVY DULL	BROWN-BLACK. BLACK. UNWEATHERED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
18.80	0.02			100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.19	0.39	30		90% COAL, HEAVY DULL 10% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, INTERCALATIONS, BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
19.79	0.60	0		CORE LOSS	
19.89	0.10	50		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK.
19.91	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
20.05	0.14	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
20.45	0.40	0		CORE LOSS	
20.53	0.08	70		100% CARBONACEOUS MUDSTONE	SOOTY, BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK.
20.75	0.22	80		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, INTERCALATIONS, GREY. BANDS, BROWN-BLACK. UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
20.81	0.06	50		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, SOOTY, BLACK, UNWEATHERED, VERY WEAK ROCK.
20.86	0.05	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, WEAK ROCK.
21.06	0.20	50		80% COAL, HEAVY DULL 20% CARBONACEOUS MUDSTONE	BADLY BROKEN, INTERCALATIONS, BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
21.09	0.03	50		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, BADLY BROKEN, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
21.41	0.32	0		CORE LOSS	
22.00	0.59	70		75% COAL, HEAVY DULL 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, INTERCALATIONS, BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
22.30	0.30	0		CORE LOSS	
22.48	0.18	20		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
22.53	0.01	100		100% SHEAR/FAULT ZONE	WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: COAL BAND LYING ALONG FAULT PLANE
22.54	0.01	50		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
22.56	0.02	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.58	0.02	60		90% COAL, HEAVY DULL 10% SILTSTONE	BADLY BROKEN, INTERCALATIONS, BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
22.66	0.08	100		100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
22.72	0.06	80		80% CARBONACEOUS MUDSTONE 20% COAL, HEAVY DULL	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
22.77	0.05	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, LIGHT BROWN. BANDS, PELLETAL, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
22.79	0.02	90		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
22.83	0.04	100		100% SILTSTONE	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
22.96	0.13	100		70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	LIGHT BROWN. PELLETAL, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR.
23.08	0.12	90		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
23.11	0.03	0		CORE LOSS	
				TOP OF MT. NICHOLAS UPPER 8 : 483.27 M R.L.	
23.33	0.22	90		95% COAL, HEAVY DULL 4% CARBONACEOUS MUDSTONE 1% SILTSTONE	BLACK. LAMINAE, BROWN-BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
23.35	0.02	100		100% SILTSTONE	PINK-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
23.48	0.13	100		99% COAL, DULL WITH FEW BRIGHT BANDS 1% SILTSTONE	BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR.
23.60	0.12	100		85% CARBONACEOUS MUDSTONE 10% SILTSTONE 5% COAL, BRIGHT	BROWN-BLACK. BANDS, BROWN. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, TIGHT NON PLANAR.
23.93	0.33	90		99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BADLY BROKEN, BLACK. CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.82 M; SAMPLED THICKNESS= 0.00 M	
24.00	0.07	100		85% CARBONACEOUS MUDSTONE 15% PYRITE	BROWN-BLACK. LENSES, YELLOW. UNWEATHERED, MODERATELY WEAK ROCK.
24.20	0.20	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
24.88	0.68	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
24.90	0.02	100		80% SILTSTONE 20% MUDSTONE	GREY-BROWN. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
24.96	0.06	0		CORE LOSS	
25.33	0.37	100		80% SILTSTONE 20% MUDSTONE	GREY-BROWN. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
26.11	0.78	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
26.46	0.35	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION.
26.62	0.16	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.92	0.30	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
27.00	0.08	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.23	0.23	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	INTERCALATIONS, GREY. LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
27.42	0.19	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
27.44	0.02	100		98% SILTSTONE 2% COAL	CARBONACEOUS, BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.60	0.16	100		99% SANDSTONE,FINE GRAINED 1% SILTSTONE	SILTSTONE, LIGHT GREY. CARBONACEOUS, LAMINAE, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
27.65	0.05	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
27.75	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.48	1.73	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
29.66	0.18	100		95% MUDSTONE 5% COAL	GREY. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
30.03	0.37	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.17	0.14	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
30.64	0.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
30.73	0.09	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
33.35	2.62	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
33.59	0.24	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
33.61	0.02	100		70% SANDSTONE,FINE GRAINED 30% COAL	WHITE. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
34.93	1.32	100		100% SANDSTONE	MED.-FINE GRAINED, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH CROSS LAMINATION.
36.12	1.19	100		98% SANDSTONE,COARSE GRAINED 2% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
36.55	0.43	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
37.00	0.45	100		98% SANDSTONE 2% COAL	MED.-COARSE GRAINED, GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
37.83	0.83	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
37.87	0.04	70		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
37.93	0.06	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
39.61	1.68			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.00	0.39			100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
40.30	0.30	85		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
40.40	0.10			90% SANDSTONE,FINE GRAINED 10% COAL	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
40.80	0.40	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
41.08	0.28	100		100% SANDSTONE,FINE GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
41.14	0.06	100		90% SANDSTONE 6% COAL 4% MUDSTONE	MED.-COARSE GRAINED. LENSES, FRAGMENTS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 58 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
41.74	0.60	100		80% SANDSTONE 18% COAL 2% MUDSTONE	MED.-COARSE GRAINED, ARKOSIC, LIGHT GREY. FRAGMENTS, LUSTROUS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 36 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
41.90	0.16	100		90% SANDSTONE,FINE GRAINED 10% COAL	CALCAREOUS, WHITE. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
42.50	0.60	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
42.93	0.43	100		95% SANDSTONE,FINE GRAINED 5% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.41	0.48	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
43.64	0.23	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
44.23	0.59	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
44.78	0.55	100		55% SANDSTONE,MEDIUM GRAINED 45% MUDSTONE	COALY, STREAKS, LIGHT GREY. LENSES, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 56 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.04	0.26	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.41	0.37	100		70% SANDSTONE,FINE GRAINED 20% SANDSTONE,COARSE GRAINED 10% COAL	INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
45.94	0.53	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
47.56	1.62	100		80% SANDSTONE 10% COAL 10% MUDSTONE	MED.-COARSE GRAINED, INTERCALATIONS, LIGHT GREY. FRAGMENTS, LENSES, BLACK. FRAGMENTS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
47.58	0.02	0		CORE LOSS	
48.16	0.58	100		100% SANDSTONE,MEDIUM GRAINED	UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: JOINT AT	TOP OF UNIT
48.65	0.49	80		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.65	0.00	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
50.49	1.84	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
50.74	0.25	100		99% SANDSTONE 1% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
51.55	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: JOINT EXTENDS	2/3 OF UNIT
51.60	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG.
52.36	0.76	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
52.60	0.24	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, UNWEATHERED, MODERATELY WEAK ROCK.
53.04	0.44	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
53.11	0.07	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
53.53	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
54.22	0.69	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.
54.43	0.21	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
54.84	0.41	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, SCREE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
55.09	0.25	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
55.32	0.23	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS SHALE	INTERCALATIONS, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 21 DEG.
55.51	0.19	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
55.68	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
57.79	2.11	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 4 DEG.
59.45	1.66	100		99% SANDSTONE 1% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG.
59.66	0.21	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS SHALE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY. COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
59.97	0.31	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
60.08	0.11	100	44T01	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
60.36	0.28	100		100% MUDSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., SLOW SLAKING, NON STICKY.
60.40	0.04	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. LENSES, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., RAPID SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 445.98 M R.L.	
60.42	0.02	100	44A01	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.47	0.05	100	44A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
60.53	0.06	100	44A01	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.67	0.14	100	44A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.73	0.06	100	44A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.75	0.02	100	44A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.76	0.01	100	44A01	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.79	0.03	100	44A01	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.80	0.01	100	44A01	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
60.85	0.05	100	44A02	100% MUDSTONE	CARBONACEOUS, STREAKS, WHITE, UNWEATHERED, WEAK ROCK.
60.88	0.03	100	44A02	50% COAL, HEAVY DULL 50% COAL, MID LUSTROUS	GRADING TO, COARSE GRAINED, BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
60.90	0.02	100	44A02	100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
60.95	0.05	100	44A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, WEAK ROCK.
60.98	0.03	100	44A02	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
61.01	0.03	100	44A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK.
61.08	0.07	100	44A02	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, WEAK ROCK.
61.11	0.03	100	44A02	95% MUDSTONE 5% COAL, BRIGHT	CARBONACEOUS, GREY-BROWN. STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
61.19	0.08	100	44A02	100% MUDSTONE	COALY, FRAGMENTS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
61.23	0.04	100	44A02	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.25	0.02	100	44A02	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.27	0.02	100	44A02	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.31	0.04	100	44A02	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.32	0.01	100	44A02	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.35	0.03	100	44A02	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
61.38	0.03	100	44A02	60% COAL, DULL 40% COAL, BRIGHT	BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK.
61.49	0.11	100	44A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.50	0.01	100	44A02	100% MUDSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
61.51	0.01	100	44A02	90% COAL, DULL 10% MUDSTONE	BRIGHT COAL, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
61.58	0.07	100	44A02	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.61	0.03	100	44A02	50% COAL, BRIGHT 50% COAL, MID LUSTROUS - DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
61.75	0.14	100	44A02	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
61.76	0.01	100	44A02	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.80	0.04	100	44A02	75% COAL, MID LUSTROUS 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
61.82	0.02	100	44A02	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.83	0.01	100	44A02	70% CARBONACEOUS MUDSTONE 30% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
61.90	0.07	100	44A02	50% COAL, BRIGHT 50% CARBONACEOUS MUDSTONE	BLACK. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
61.91	0.01	100	44A02	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.94	0.03	100	44A02	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.97	0.03	100	44A02	100% CARBONACEOUS MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
62.16	0.19	100	44A02	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
62.21	0.05	100	44A02	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
62.24	0.03	100	44A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.32	0.08	100	44A02	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.33	0.01	100	44A02	50% COAL, MID LUSTROUS 50% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
62.38	0.05	100	44A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
62.59	0.21	100	44A02	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
62.60	0.01	100	44A02	75% COAL, BRIGHT 20% MUDSTONE 5% CARBONACEOUS MUDSTONE	BLACK. FRAGMENTS, PELLETAL, GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 8 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
62.63	0.03	100	44A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.72	0.09	100	44A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.73	0.01	100	44A02	50% COAL, MID LUSTROUS 50% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
62.75	0.02	100	44A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.86	0.11	100	44A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.89	0.03	100	44A02	80% COAL, DULL WITH FEW BRIGHT BANDS 20% MUDSTONE	BLACK. LENSES, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
62.95	0.06	100	44A02	50% COAL, HEAVY DULL 50% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK. MUDSTONE, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 2.55 M; SAMPLED THICKNESS= 2.55 M

63.15	0.20	100		75% MUDSTONE 25% SILTSTONE	GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING.
63.28	0.13	100	44T02	75% MUDSTONE 25% SILTSTONE	GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS.
63.40	0.12	100	44T03	75% MUDSTONE 25% SILTSTONE	GREY. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
63.44	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
63.45	0.01	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
63.51	0.06	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.61	0.10	100	44A03	75% COAL, DULL 25% MUDSTONE	BLACK. LENSES, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
63.62	0.01	100	44A03	75% COAL, MID LUSTROUS 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
63.63	0.01	100	44A03	50% COAL, MID LUSTROUS 50% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
63.70	0.07	100	44A03	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.71	0.01	100	44A03	50% COAL, MID LUSTROUS 50% MUDSTONE	BLACK. BRIGHT COAL, STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
63.75	0.04	100	44A03	95% COAL, MID LUSTROUS 5% MUDSTONE	BRIGHT COAL, STREAKS, BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
63.92	0.17	100	44A03	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.94	0.02	100	44A03	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.95	0.01	100	43A03	100% TONSTEIN	BRIGHT COAL, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
63.97	0.02	100	43A03	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.98	0.01	100	43A03	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
63.99	0.01	100	43A03	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.00	0.01	100	43A03	80% COAL, BRIGHT WITH NUMEROUS DULL BANDS 20% MUDSTONE	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
64.09	0.09	100	43A03	100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
64.23	0.14	100	43A03	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.28	0.05	100	43A03	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
64.33	0.05	100	43A03	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.34	0.01	100	43A03	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
64.48	0.14	100	44A03	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.51	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
64.57	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING.
64.58	0.01	100		50% MUDSTONE 50% COAL, BRIGHT	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
64.72	0.14	100	44T04	70% MUDSTONE 15% MUDSTONE 15% SILTSTONE	GREY. BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.12	0.40	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS.
65.24	0.12	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
67.28	2.04	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
67.31	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
67.40	0.09	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
67.87	0.47	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
67.90	0.03	100		50% MUDSTONE 50% LIMESTONE	GREY. WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
69.60	1.70	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG.
69.83	0.23	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

NOTE: SAME STRIKE OPPOSITE DIP

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.00	0.17	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.10	0.10	100	44A04	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.55	0.45	100	44A04	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.59	0.04	100	44A04	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.62	0.03	100	44A04	100% COAL, DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.67	0.05	100	44A04	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
70.75	0.08	100	44A04	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.79	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
70.96	0.17	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
71.01	0.05	100		50% MUDSTONE 40% CARBONACEOUS MUDSTONE 10% COAL	CARBONACEOUS, INTERCALATIONS, DARK GREY. LAMINAE, BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT NON PLANAR.
71.05	0.04	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, DARK GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES. NOTE: CARB MUD BAND DISPLACED 0.5 CM
71.08	0.03	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BROWN-BLACK. LENSES, PELLETAL, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
71.09	0.01	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
71.23	0.14	100	44T05	100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 4 DEG.
71.57	0.34	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.06	0.49	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 63 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
72.30	0.24	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
72.38	0.08	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING.
				TOP OF MT. NICHOLAS MIDDLE 2 : 434.00 M R.L.	
72.40	0.02	100	44A05	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
72.43	0.03	100	44A05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.52	0.09	100	44A05	90% MUDSTONE 10% COAL, BRIGHT	CARBONACEOUS, BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
72.84	0.32	100	44A05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.85	0.01	100	44A05	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.96	0.11	100	44A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
72.97	0.01	100	44A05	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.00	0.03	100	44A05	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
73.21	0.21	100	44A06	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.41	0.20	100	44A06	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.66	0.25	100	44A06	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.81	0.15	100	44A06	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.84	0.03	100	44A06	80% MUDSTONE 20% COAL	DARK BROWN. STREAKS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.00	0.16	100	44A06	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.01	0.01	100	44A06	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.30	0.29	100	44A06	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.31	0.01	100	44A06	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.37	0.06	100	44A06	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.53	0.16	100	44A06	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.59	0.06	100	44A06	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.60	0.01	100	44A06	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.68	0.08	100	44A06	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.71	0.03	100	44A06	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.72	0.01	100	44A06	100% COAL, MID LUSTROUS	BRIGHT COAL, STREAKS, BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK.
74.78	0.06	100	44A06	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.79	0.01	100	44A06	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.88	0.09	100	44A06	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.89	0.01	100	44A06	100% TONSTEIN	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.93	0.04	100	44A06	60% COAL, MID LUSTROUS 40% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.94	0.01	100	44A06	100% TONSTEIN	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
75.00	0.06	100	44A07	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.01	0.01	100	44A07	100% COAL, MID LUSTROUS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.03	0.02	100	44A07	90% COAL, MID LUSTROUS - BRIGHT 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.12	0.09	100	44A07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.74 M; SAMPLED THICKNESS= 2.74 M	
75.15	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
75.16	0.01	100		100% SILTSTONE	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
75.22	0.06	100		80% MUDSTONE 18% MUDSTONE 2% CARBONACEOUS SHALE	INTERCALATIONS, DARK GREY. FRAGMENTS, LIGHT BROWN. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
75.41	0.19	100		99% MUDSTONE 1% COAL	CARBONACEOUS, GREY-BROWN. LENSES, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
75.87	0.46	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG.
76.33	0.46	100		100% SILTSTONE	MASSIVE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG.
77.53	1.20	0		CORE LOSS	
77.59	0.06	100		100% CLAYSTONE	GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
77.70	0.11	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG.
77.73	0.03	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
77.87	0.14	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
78.00	0.13	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
78.13	0.13	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
78.22	0.09	90		100% MUDSTONE	BRECCIATED, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.30	0.08	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.61	0.31	100		80% SANDSTONE,FINE GRAINED 10% SILTSTONE 10% MUDSTONE	LAMINAE, INTERCALATIONS, LIGHT GREY. LAMINAE, LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH CROSS LAMINATION, WITH DISTURBED BEDDING, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.12	0.51	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.19	0.07	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
79.40	0.21	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.90	0.50	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 20 DEG., WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
80.62	0.72	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
80.81	0.19	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
80.94	0.13	100	44T06	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
81.10	0.16	100	44T07	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH PLANT REMAINS.
81.33	0.23	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 3 : 425.05 M R.L.	
81.36	0.03	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
81.68	0.32	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
81.72	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
81.75	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
81.76	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
81.80	0.04	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BADLY BROKEN, BLACK. CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
81.90	0.10	100		98% COAL, HEAVY DULL 2% MUDSTONE	BADLY BROKEN, BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
81.94	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
82.00	0.06	100		90% COAL, HEAVY DULL 10% COAL, BRIGHT	BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.67 M; SAMPLED THICKNESS= 0.00 M	
82.10	0.10	100		85% SILTSTONE 15% MUDSTONE	INTERCALATIONS, GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK.
82.33	0.23	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	INTERCALATIONS, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
82.59	0.26	100		80% MUDSTONE 20% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING.
82.73	0.14	100		83% SILTSTONE 16% MUDSTONE 1% COAL	INTERCALATIONS, GREY. CARBONACEOUS, BANDS, GREY-BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
82.75	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
82.95	0.20	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH PLANT REMAINS.
83.16	0.21	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.40	0.24	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
84.11	0.71	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
84.25	0.14	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION.
84.45	0.20	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
84.57	0.12	100		98% SILTSTONE 2% SANDSTONE,FINE GRAINED	GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
84.78	0.21	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
85.12	0.34	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
85.45	0.33	100		65% SANDSTONE,FINE GRAINED 35% MUDSTONE	INTERCALATIONS, LIGHT GREY. SILTSTONE, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.40	0.95	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION.
87.11	0.71	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
87.55	0.44	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LAMINAE, INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
87.99	0.44	100		55% SANDSTONE,FINE GRAINED 45% SANDSTONE,MEDIUM GRAINED	LAMINAE, INTERCALATIONS, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CARBONACEOUS WISPS.
88.66	0.67	100		96% SANDSTONE 4% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
93.14	4.48	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
93.96	0.82	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
96.31	2.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
96.94	0.63	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.74	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
98.52	0.78	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
99.10	0.58	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
100.02	0.92	100		99% SANDSTONE,COARSE GRAINED 1% COAL	GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS.
100.08	0.06	100		82% SANDSTONE,COARSE GRAINED 17% CARBONACEOUS MUDSTONE 1% COAL, HEAVY DULL	GREY. LENSES, FRAGMENTS, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
100.12	0.04	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
100.17	0.05	100		85% SANDSTONE,COARSE GRAINED 12% COAL 3% MUDSTONE	GREY. LENSES, STREAKS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
100.19	0.02	100		60% MUDSTONE 40% COAL, HEAVY DULL	CARBONACEOUS, INTERCALATIONS, BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
100.24	0.05	100		55% MUDSTONE 35% COAL 10% SANDSTONE,COARSE GRAINED	SILTSTONE, LENSES, GREY. LENSES, STREAKS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
100.28	0.04	100		96% COAL, DULL 4% MUDSTONE	BLACK. PELLETAL, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
100.53	0.25	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
100.54	0.01	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.58	0.04	100		80% SANDSTONE 18% MUDSTONE 2% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 40 DEG.
100.65	0.07	100		100% SILTSTONE	LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
100.76	0.11	100		80% SANDSTONE 15% COAL 5% MUDSTONE	MED.-COARSE GRAINED, GREY. LENSES, FRAGMENTS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
100.82	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
101.08	0.26	100		99% SANDSTONE 1% COAL	MED.-COARSE GRAINED, GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
101.09	0.01	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
102.25	1.16	100		98% SANDSTONE,MEDIUM GRAINED 1% MUDSTONE 1% COAL	GRADING TO, SCREE, GREY. LENSES, PELLETAL, GREY. LENSES, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
102.61	0.36	100		98% SANDSTONE,COARSE GRAINED 1% MUDSTONE 1% COAL	GREY. PELLETAL, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
103.77	1.16	100		98% SANDSTONE 1% COAL 1% MUDSTONE	MED.-COARSE GRAINED, GREY. FRAGMENTS, BLACK. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
104.34	0.57	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.49	3.15	100		99% SANDSTONE 1% COAL	MED.-FINE GRAINED, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
108.10	0.61	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.34	0.24	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
111.83	3.49	100		99% SANDSTONE,MEDIUM GRAINED 1% MUDSTONE	COALY, STREAKS, GREY. LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
112.65	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
112.77	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
112.95	0.18	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.14	0.19	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
113.19	0.05	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
113.35	0.16	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	GRADING TO, GREY. CARBONACEOUS, STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
114.52	1.17	100		60% SANDSTONE,FINE GRAINED 40% SANDSTONE,MEDIUM GRAINED	BANDS, INTERCALATIONS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
115.00	0.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.43	0.43	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
116.17	0.74	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
116.28	0.11	100		80% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 10% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.06	0.78	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
118.55	1.49	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.65	1.10	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.89	2.24	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
122.13	0.24	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG.
123.91	1.78	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
124.16	0.25	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.36	0.20	100		70% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	BANDS, LIGHT GREY. BANDS, LIGHT GREY. LENSES, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH MUD PELLETS.
124.54	0.18	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.62	0.08	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 30 DEG.
124.73	0.11	100		80% SILTSTONE 20% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
124.98	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
125.40	0.42	100		90% MUDSTONE 10% SILTSTONE	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
125.45	0.05	100		70% MUDSTONE 30% COAL	CARBONACEOUS, BROWN. INTERCALATIONS, COARSE GRAINED, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
125.60	0.15	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG.
125.80	0.20	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS.
126.23	0.43	100		79% SANDSTONE,FINE GRAINED 20% SILTSTONE 1% CARBONACEOUS SHALE	LIGHT GREY. LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING.
126.37	0.14	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
126.58	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.08	0.50	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	GREY. LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG., WITH CROSS LAMINATION.
127.11	0.03	100		94% SANDSTONE,FINE GRAINED 5% SILTSTONE 1% CARBONACEOUS SHALE	LIGHT GREY. BANDS, LIGHT GREY. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.16	0.05	100		80% SILTSTONE 20% MUDSTONE	CARBONACEOUS, DARK BROWN. CARBONACEOUS, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
127.19	0.03	100		60% SANDSTONE 40% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.57	0.38	100		60% MUDSTONE 30% SILTSTONE 10% SANDSTONE,FINE GRAINED	GREY. BANDS, LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
127.87	0.30	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS.
127.94	0.07	100		90% SILTSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
128.09	0.15	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
128.53	0.44	100		80% SILTSTONE 10% MUDSTONE 10% SANDSTONE	LAMINAE, LIGHT GREY. LAMINAE, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CROSS LAMINATION, WITH BURROWING, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
128.86	0.33	100		93% SANDSTONE 5% SILTSTONE 2% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
129.48	0.62	100		98% SANDSTONE,FINE GRAINED 2% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
129.57	0.09	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
130.22	0.65	100		80% SANDSTONE 10% CARBONACEOUS SHALE 10% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
130.48	0.26	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.73	0.25	100		50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	GRADING TO, LIGHT GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
130.87	0.14	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
130.90	0.03	100		50% SANDSTONE 50% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, LIGHT GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
130.91	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
130.99	0.08	100		40% COAL, DULL WITH FEW BRIGHT BANDS 30% MUDSTONE 30% CARBONACEOUS MUDSTONE	BANDS, BLACK. CARBONACEOUS, BANDS, DARK BROWN. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
131.16	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
132.34	1.18	100		96% MUDSTONE 3% CARBONACEOUS SHALE 1% SANDSTONE,FINE GRAINED	GREY. BANDS, DARK BROWN. FRAGMENTS, YELLOW. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
132.56	0.22	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
132.90	0.34	100		50% SANDSTONE 50% SILTSTONE	VERY FINE GRAINED, GRADING TO, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
133.05	0.15	100		100% SANDSTONE,FINE GRAINED	BANDS, LIGHT GREY.
133.23	0.18	100		100% SANDSTONE,FINE GRAINED	GRADING TO, VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
133.54	0.31	100		60% SILTSTONE 40% SANDSTONE	LAMINAE, GREY. VERY FINE GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
133.65	0.11	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 8 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
133.76	0.11	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, GREY. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
134.24	0.48	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
134.42	0.18	100		60% SILTSTONE 40% SANDSTONE	GREY. VERY FINE GRAINED, GREY. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
137.06	2.64	100		98% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
137.68	0.62	100		98% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BLACK. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
138.25	0.57	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
138.62	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINT, DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
139.10	0.48	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 40 DEG., WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
139.38	0.28	100		97% SANDSTONE,MEDIUM GRAINED 2% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
139.70	0.32	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
139.83	0.13	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.04	0.21	100		60% SANDSTONE 20% COAL 20% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. FRAGMENTS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.05	0.01	70		100% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, LIGHT GREY, WITH CLAY ON JOINTS, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.43	0.38	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.57	0.14	100	44T10	100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
140.69	0.12	100	44T11	100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
141.01	0.32	100		99% SANDSTONE,FINE GRAINED 1% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
141.22	0.21	100		70% SANDSTONE,FINE GRAINED 15% COAL 15% MUDSTONE	LIGHT GREY. FRAGMENTS, BLACK. FRAGMENTS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 30 DEG., WITH CROSS LAMINATION.
				TOP OF MT. NICHOLAS LOWER 2 : 365.16 M R.L.	
141.23	0.01	100	44A08	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
141.33	0.10	100	44A08	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
141.39	0.06	100	44A08	98% COAL, MID LUSTROUS 2% COAL, BRIGHT	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
141.43	0.04	100	44A08	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
141.58	0.15	100	44A08	99% COAL, MID LUSTROUS 1% COAL, BRIGHT	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
141.64	0.06	100	44A08	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
141.77	0.13	100	44A08	95% COAL, MID LUSTROUS 5% MUDSTONE	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
141.81	0.04	100	44A08	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
141.87	0.06	100	44A08	92% CARBONACEOUS MUDSTONE 7% MUDSTONE 1% COAL	BROWN-BLACK. CARBONACEOUS, DARK BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
141.91	0.04	100	44A08	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
141.93	0.02	100	44A08	90% CARBONACEOUS MUDSTONE 10% COAL	BROWN-BLACK. LENSES. UNWEATHERED, MODERATELY WEAK ROCK.
141.94	0.01	100	44A08	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.02	0.08	100	44A08	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.16	0.14	100	44A08	75% COAL, DULL 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
142.18	0.02	100	44A09	95% MUDSTONE 5% COAL	ARKOSIC, DARK BROWN. LUSTROUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
142.23	0.05	100	44A09	95% CARBONACEOUS MUDSTONE 4% COAL 1% MUDSTONE	BROWN-BLACK. BANDS, BLACK. STREAKS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
142.29	0.06	100	44A09	98% COAL, MID LUSTROUS 2% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
142.40	0.11	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.41	0.01	100	44A09	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.43	0.02	100	44A09	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
142.45	0.02	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.48	0.03	100	44A09	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.51	0.03	100	44A09	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.71	0.20	100	44A09	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.73	0.02	100	44A09	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.76	0.03	100	44A09	75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
142.82	0.06	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.83	0.01	100	44A09	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
142.86	0.03	100	44A09	75% MUDSTONE 25% COAL	LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
142.90	0.04	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.98	0.08	100	44A09	75% CARBONACEOUS MUDSTONE 24% MUDSTONE 1% COAL	BLACK. BANDS, LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.08	0.10	100	44A09	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.20	0.12	100	44A09	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.30	0.10	100	44A09	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
143.31	0.01	100	44A09	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.32	0.01	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.34	0.02	100	44A09	65% CARBONACEOUS MUDSTONE 35% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.48	0.14	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
143.54	0.06	100	44A09	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
143.61	0.07	100	44A09	70% COAL, HEAVY DULL 30% CARBONACEOUS MUDSTONE	BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
143.69	0.08	100	44A09	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.76	0.07	100	44A09	60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	INTERCALATIONS, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.83	0.07	100	44A09	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
143.86	0.03	100	44A09	80% COAL, HEAVY DULL 20% CARBONACEOUS MUDSTONE	BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
143.98	0.12	100	44A09	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
144.00	0.02	100	44A09	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
144.01	0.01	100	44A09	95% MUDSTONE 5% COAL	DARK BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
144.13	0.12	100	44A10	98% COAL, DULL WITH NUMEROUS BRIGHT BANDS 2% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
144.18	0.05	100	44A10	80% COAL, MID LUSTROUS - BRIGHT 20% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.96 M; SAMPLED THICKNESS= 2.96 M	
144.20	0.02	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING.
144.35	0.15	100	44T13	100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
144.37	0.02	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
144.46	0.09	100		70% SANDSTONE 30% MUDSTONE	VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
144.52	0.06	100		95% SANDSTONE 5% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.58	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG.
144.71	0.13	100	44T14	95% SANDSTONE 5% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
144.79	0.08	100		95% SANDSTONE 5% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
144.86	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
144.99	0.13	100	44T15	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
145.05	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
145.15	0.10	100		75% MUDSTONE 25% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
145.45	0.30	100		99% MUDSTONE 1% COAL	CARBONACEOUS, STREAKS, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG.
145.57	0.12	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
145.99	0.42	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
146.70	0.71	100		90% SILTSTONE 10% MUDSTONE	LAMINAE, GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
148.60	1.90	100		80% SANDSTONE 18% SILTSTONE 2% MUDSTONE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
148.84	0.24	100		75% SANDSTONE 25% SILTSTONE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.51	0.67	100		95% SANDSTONE,FINE GRAINED 5% SILTSTONE	LIGHT GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 30 DEG.
149.76	0.25	100		90% SILTSTONE 10% SANDSTONE,FINE GRAINED	GREY. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG., WITH DISTURBED BEDDING.
149.87	0.11	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
150.45	0.58	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
150.51	0.06	100		100% SILTSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
150.57	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
150.60	0.03	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
150.64	0.04	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED.
153.15	2.51	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG., WITH CARBONACEOUS WISPS.
153.72	0.57	100		80% MUDSTONE 20% SANDSTONE	DARK GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
153.98	0.26	40		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
154.09	0.11	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
154.13	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
154.15	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
154.18	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
154.30	0.12	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
154.38	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 68 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
154.39	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
154.59	0.20	100		95% SILTSTONE 5% CARBONACEOUS SHALE	BROWN. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
154.92	0.33	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
155.56	0.64	100		90% MUDSTONE 10% SILTSTONE	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
155.86	0.30	100		65% SILTSTONE 25% SANDSTONE 10% MUDSTONE	CARBONACEOUS, STREAKS, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
156.04	0.18	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
156.34	0.30	100		75% SANDSTONE,FINE GRAINED 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
156.77	0.43	100		95% SANDSTONE 5% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
159.18	2.41	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
159.52	0.34	100		85% SILTSTONE 10% CARBONACEOUS SHALE 5% SANDSTONE	LIGHT GREY. LAMINAE, BLACK. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
159.53	0.01	100		100% CARBONACEOUS MUDSTONE	BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
159.56	0.03	100		75% MUDSTONE 25% CARBONACEOUS SHALE	GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
159.58	0.02	100		98% SANDSTONE 2% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, PINK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
159.62	0.04	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	BROWN-BLACK. ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
160.08	0.46	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
160.89	0.81	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
160.99	0.10	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BROWN-BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
161.61	0.62	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
161.68	0.07	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
161.73	0.05	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BROWN-BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
161.91	0.18	100		100% MUDSTONE	BROWN.
162.09	0.18	100		60% MUDSTONE 39% CARBONACEOUS MUDSTONE 1% COAL	CARBONACEOUS, LAMINAE, DARK BROWN. BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
162.37	0.28	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
162.50	0.13	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. PELLETAL, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
162.56	0.06	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
162.64	0.08	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
162.77	0.13	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
163.43	0.66	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
163.88	0.45	100		98% CARBONACEOUS MUDSTONE 2% COAL	BROWN-BLACK. PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
164.21	0.33	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
164.33	0.12	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
164.40	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
165.29	0.89	100		75% MUDSTONE 25% SANDSTONE	SILTSTONE, LAMINAE, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
165.32	0.03	100		59% CARBONACEOUS MUDSTONE 40% MUDSTONE 1% COAL	BANDS, BROWN-BLACK. LENSES, GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
165.35	0.03	100		75% MUDSTONE 25% COAL	LENSES, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
165.54	0.19	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	BANDS, DARK BROWN. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
166.21	0.67	100		75% MUDSTONE 25% SANDSTONE	SILTSTONE, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
166.66	0.45	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
166.75	0.09	100		100% MUDSTONE	LAMINAE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
166.77	0.02	100		70% CARBONACEOUS MUDSTONE 25% MUDSTONE 5% COAL	BROWN-BLACK. LENSES, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
166.84	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
166.87	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	23.11 - 23.93 M	0.82 M
M1	2.55 M	60.40 - 62.95 M	2.55 M
M2	2.74 M	72.38 - 75.12 M	2.74 M
M3	0.00 M	81.33 - 82.00 M	0.67 M
L2	2.96 M	141.22 - 144.18 M	2.96 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
44T01	59.97 - 60.08 M	0.11 M
44A01	60.40 - 60.80 M	0.40 M
44A02	60.80 - 62.95 M	2.15 M
44T02	63.15 - 63.28 M	0.13 M
44T03	63.28 - 63.40 M	0.12 M
44A03	63.51 - 63.94 M	0.43 M
43A03	63.94 - 64.34 M	0.40 M
44A03	64.34 - 64.48 M	0.14 M
44T04	64.58 - 64.72 M	0.14 M
44A04	70.00 - 70.75 M	0.75 M
44T05	71.09 - 71.23 M	0.14 M
44A05	72.38 - 73.00 M	0.62 M
44A06	73.00 - 74.94 M	1.94 M
44A07	74.94 - 75.12 M	0.18 M
44T06	80.81 - 80.94 M	0.13 M
44T07	80.94 - 81.10 M	0.16 M
44T10	140.43 - 140.57 M	0.14 M
44T11	140.57 - 140.69 M	0.12 M
44A08	141.22 - 142.16 M	0.94 M
44A09	142.16 - 144.01 M	1.85 M
44A10	144.01 - 144.18 M	0.17 M
44T13	144.20 - 144.35 M	0.15 M
44T14	144.58 - 144.71 M	0.13 M
44T15	144.86 - 144.99 M	0.13 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 45

HOLE TYPE	CORE
EASTING	593,412 M AM GRID
NORTHING	5,401,240 M AM GRID
ELEVATION	510.90 M
TOTAL DEPTH DRILLED	115.60 M
DRILLING STARTED	24/05/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.10	0.10	5		60% SOIL 40% DOLERITE	BLACK. SCREE, GREY. WEATHERED TO SOIL, WEAKLY CEMENTED.
4.80	4.70	30		100% DOLERITE	SCREE, BADLY BROKEN, GREY, VERY STRONG ROCK.
5.00	0.20	100		100% MUDSTONE	SCREE, BADLY BROKEN, GREY-BROWN, VERY WEAK ROCK.
5.20	0.20	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY-GREEN, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
5.46	0.26	100		100% CLAYSTONE	WHITE, SOFT, MODERATELY STICKY.
5.57	0.11	100		100% CLAYSTONE	ORANGE, VERY WEAK ROCK.
5.70	0.13	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
6.00	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, VERY WEAK ROCK.
8.00	2.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, WEAK ROCK.
8.50	0.50	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT BROWN, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: VOIDS FROM WEATHERED OUT FOSSILS	
9.00	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, WEAK ROCK, WITH PLANT REMAINS.
9.05	0.05	100		100% MUDSTONE	GREY-BROWN, WEAK ROCK, WITH PLANT REMAINS.
10.00	0.95	100		100% SANDSTONE,MEDIUM GRAINED	GREY, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF WEATHERING	
16.12	6.12	50		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS MUDSTONE	INTERCALATIONS, ARKOSIC, GREY. FRAGMENTS, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 12 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
				NOTE: PC CORE END AT 13.84M	
16.15	0.03	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 15 DEG.
				NOTE: CLEAT WITH TWO ORIENTATIONS	
18.36	2.21	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
19.40	1.04	100		97% SANDSTONE,MEDIUM GRAINED 3% MUDSTONE	ARKOSIC, GREY. PEBBLY, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
19.70	0.30	100		40% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE 20% CARBONACEOUS MUDSTONE	ARKOSIC, GREY. PEBBLY, LIGHT GREY. PEBBLY, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.96	0.26	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.07	7.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
27.16	0.09	100	45T01	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
27.29	0.13	100	45T02	100% SANDSTONE,MEDIUM GRAINED	LITHIC, BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
27.44	0.15	100		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS MUDSTONE	LITHIC, GREY. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
28.45	1.01	100		100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
28.59	0.14	100	45T03	100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
28.70	0.11	100	45T04	100% MUDSTONE	CARBONACEOUS, STREAKS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
28.83	0.13	100	45T05	100% MUDSTONE	INTERCALATIONS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
28.84	0.01	100	45T05	90% MUDSTONE 10% SILTSTONE	SILTSTONE, INTERCALATIONS, DARK GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
28.96	0.12	100		100% MUDSTONE	BANDS, INTERCALATIONS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
29.09	0.13	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
29.19	0.10	100	45T06	70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, STREAKS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.22	0.03	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
29.29	0.07	100	45T07	70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
29.33	0.04	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 481.57 M R.L.	
29.36	0.03	100	45A01	100% COAL, DULL WITH FEW BRIGHT BANDS	COALY, FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
29.39	0.03	100	45A01	100% COAL, DULL	TRACES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 62 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.43	0.04	100	45A01	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.47	0.04	100	45A01	100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 38 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
29.54	0.07	100	45A01	100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK.
29.62	0.08	100	45A01	100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 38 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
29.63	0.01	100	45A01	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.71	0.08	100	45A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.75	0.04	100	45A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.85	0.10	100	45A01	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.92	0.07	0	45A06	CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.96	0.04	100	45A02	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.02	0.06	100	45A02	100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
30.04	0.02	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.06	0.02	100	45A02	100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
30.07	0.01	100	45A02	100% COAL, MID LUSTROUS	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
30.14	0.07	100	45A02	99% COAL, MID LUSTROUS - DULL 1% MUDSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 52 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
30.23	0.09	100	45A02	100% COAL, MID LUSTROUS	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.25	0.02	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.29	0.04	100	45A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.30	0.01	100	45A02	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.40	0.10	100	45A02	100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.46	0.06	100	45A02	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.47	0.01	100	45A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.52	0.05	100	45A02	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
30.56	0.04	100	45A02	90% COAL, DULL 10% COAL, BRIGHT	SILTSTONE, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
30.59	0.03	0	45A02	CORE LOSS	
30.60	0.01	100	45A02	100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
30.62	0.02	100	45A02	100% COAL, DULL	BRIGHT COAL, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
30.73	0.11	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.75	0.02	100	45A02	100% MUDSTONE	SILTSTONE, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
30.81	0.06	100	45A02	99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.86	0.05	100	45A02	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
30.90	0.04	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.94	0.04	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.95	0.01	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.02	0.07	100	45A02	100% COAL, MID LUSTROUS	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
31.03	0.01	100	45A02	50% COAL, BRIGHT 50% COAL, DULL	BANDS, BLACK. BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
31.12	0.09	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.14	0.02	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.15	0.01	100	45A02	50% MUDSTONE 50% COAL, DULL	BANDS, INTERCALATIONS, BROWN. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
31.19	0.04	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.20	0.01	100	45A02	70% COAL, DULL 30% MUDSTONE	BLACK. LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
31.23	0.03	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.26	0.03	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.28	0.02	100	45A02	95% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% MUDSTONE	BANDS, BLACK. LENSES, BROWN. WITH LENSES OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG.
31.32	0.04	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.46	0.14	100	45A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, FOSSILIFERROUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
31.55	0.09	100	45A02	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.58	0.03	100	45A02	100% COAL, DULL WITH FEW BRIGHT BANDS	CARBONACEOUS, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 5 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.59	0.01	100	45A02	60% CARBONACEOUS MUDSTONE 37% COAL, DULL 3% COAL	BANDS, BROWN-BLACK. STREAKS, BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
31.63	0.04	100	45A02	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
31.65	0.02	100	45A03	100% CARBONACEOUS MUDSTONE	SILTSTONE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
31.72	0.07	100	45A03	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
31.73	0.01	100	45A03	100% MUDSTONE	CALCAREOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
31.76	0.03	100	45A03	100% MUDSTONE	CARBONACEOUS, LENSES, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.78	0.02	100	45A03	100% MUDSTONE	CALCAREOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG.
31.81	0.03	100	45A03	100% MUDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
31.82	0.01	100	45A03	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.85	0.04	100	45A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.88	0.02	100	45A03	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.91	0.03	100	45A03	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
31.94	0.03	100	45A03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
31.96	0.02	100	45A03	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
31.97	0.01	100	45A03	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
31.99	0.02	100	45A03	100% COAL, DULL WITH FEW BRIGHT BANDS	CARBONACEOUS, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
32.00	0.01	100	45A03	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
32.01	0.01	100	45A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
32.02	0.01	100	45A03	100% COAL, DULL	ARGILLACEOUS, BLACK, WITH VIVIANITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
32.03	0.01	100	45A03	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
32.15	0.12	100	45A03	95% COAL, DULL 5% COAL, BRIGHT	BADLY BROKEN, BLACK. BANDS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.82 M; SAMPLED THICKNESS= 2.82 M

32.25	0.10	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY. NOTE: SHEARS PERPENDICULAR TO ABOVE JOINTS
32.32	0.07	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
32.75	0.43	100		50% SILTSTONE 30% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, GREY. LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
32.80	0.05	0		CORE LOSS	
32.93	0.13	100		80% SILTSTONE 10% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY. NOTE: BASAL CONTACT AT 45 DEG

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
32.98	0.05	100	45T09	80% SILTSTONE 10% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.12	0.14	100	45T10	80% SILTSTONE 10% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.43	0.31	100		80% SILTSTONE 10% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. LIGHT GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
33.53	0.10	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
34.98	1.45	100		100% MUDSTONE	SILTSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
35.00	0.02	20		100% MUDSTONE	SILTSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
36.25	1.25	100		100% MUDSTONE	SILTSTONE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
36.46	0.21	100		100% MUDSTONE	LAMINAE, INTERCALATIONS, GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.49	0.03	100		100% CARBONACEOUS MUDSTONE	LENSES, BANDS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
36.67	0.18	100		60% MUDSTONE 40% MUDSTONE	LAMINAE, INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, DARK BROWN. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.87	0.20	0		CORE LOSS	
36.93	0.06	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	ARGILLACEOUS, LIGHT GREY. LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.97	0.04	100		100% COAL, DULL	BADLY BROKEN, INTERCALATIONS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
37.08	0.11	0		CORE LOSS	
37.85	0.77	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
38.07	0.22	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
					NOTE: SAME STRIKE AS BEDS BUT OPPOSITE DIP DIRECTION
38.57	0.50	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
38.71	0.14	100		100% MUDSTONE	BRECCIATED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
38.77	0.06	100		100% CARBONACEOUS MUDSTONE	LENSES, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 32 DEG., WITH CARBONACEOUS WISPS.
39.27	0.50	95		100% MUDSTONE	BRECCIATED, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
39.38	0.11	100		100% CARBONACEOUS MUDSTONE	BRECCIATED, BROWN-BLACK, UNWEATHERED, WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 3 : 471.52 M R.L.	
39.42	0.04	100		100% COAL, HEAVY DULL	ARGILLACEOUS, BRECCIATED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
40.28	0.86	0		CORE LOSS	
40.32	0.04	100		100% COAL, HEAVY DULL	ARGILLACEOUS, BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
40.38	0.06	100		99% CARBONACEOUS MUDSTONE 1% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN-BLACK. LENSES, BROWN. UNWEATHERED, WEAK ROCK.
40.43	0.05	100		100% COAL, HEAVY DULL	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 1.05 M; SAMPLED THICKNESS= 0.00 M	
40.50	0.07	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED.
40.67	0.17	100		100% MUDSTONE	FOSSILIFERROUS, BRECCIATED, GREY, UNWEATHERED, WEAK ROCK.
40.71	0.04	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LENSES, STREAKS, GREY-GREEN. CARBONACEOUS, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.80	0.09	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK.
40.86	0.06	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
41.02	0.16	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
41.07	0.05	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
41.18	0.11	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
41.96	0.78	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 20 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.43	0.47	80		80% SANDSTONE 20% MUDSTONE	VERY FINE GRAINED, GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.03	0.60	100		65% SANDSTONE 35% MUDSTONE	MED.-FINE GRAINED, GREY. LENSES, PEBBLY, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
46.00	2.97	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
46.25	0.25	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH SLUMP STRUCTURES, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
47.50	1.25	100		100% SANDSTONE,MEDIUM GRAINED	ARKOSIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLUMP STRUCTURES, VERY CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
48.00	0.50	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
48.34	0.34	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR.
50.00	1.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, TIGHT NON PLANAR.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
50.50	0.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE.
53.20	2.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
53.70	0.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
55.45	1.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
55.49	0.04	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
56.12	0.63	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
56.40	0.28	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	INTERCALATIONS, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
56.42	0.02	100		100% COAL, DULL	LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
56.66	0.24	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	INTERCALATIONS, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
56.80	0.14	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. PEBBLY, LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
57.00	0.20	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG.
60.75	3.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
61.06	0.31	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	MASSIVE, GREY. PEBBLY, LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
62.90	1.84	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.95	0.05	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.20	1.25	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 62 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
64.80	0.60	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, STRONG ROCK.
67.62	2.82	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.10	0.48	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	INTERCALATIONS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
68.30	0.20	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
68.40	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
68.55	0.15	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
69.43	0.88	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
69.48	0.05	100		75% SANDSTONE 25% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
69.76	0.28	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
72.15	2.39	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
72.62	0.47	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
73.00	0.38	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.39	0.39	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.43	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
73.84	0.41	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.27	3.43	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
78.06	0.79	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
78.16	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
78.39	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.55	0.16	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.80	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.83	1.03	0		CORE LOSS	
80.15	0.32	100		100% MUDSTONE	BADLY BROKEN, LIGHT GREY, UNWEATHERED, WEAK ROCK.
80.22	0.07	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
80.71	0.49	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
81.09	0.38	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
81.96	0.87	100		60% MUDSTONE 40% SILTSTONE	BANDS, INTERCALATIONS, LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
82.60	0.64	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
83.12	0.52	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	CARBONACEOUS, LAMINAE, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
83.26	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
83.35	0.09	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
83.41	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
83.54	0.13	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
83.55	0.01	100		50% MUDSTONE 50% CLAYSTONE	CARBONACEOUS, DARK GREY. CREAM. UNWEATHERED, VERY WEAK ROCK.
83.93	0.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.99	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
84.08	0.09	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
84.40	0.32	100		100% SANDSTONE	MED.-FINE GRAINED, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.50	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
84.63	0.13	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
84.83	0.20	0		CORE LOSS	
85.56	0.73	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING.
85.87	0.31	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.90	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK.
86.70	0.80	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
87.33	0.63	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
87.77	0.44	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	SILTSTONE, BANDS, GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
88.54	0.77	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
88.80	0.26	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
89.66	0.86	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
89.76	0.10	100		60% SANDSTONE 40% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
91.07	1.31	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
91.80	0.73	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
92.23	0.43	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
92.29	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
93.80	1.51	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK.
95.55	1.75	100		100% SHEAR/FAULT ZONE	MUDSTONE, FRAGMENTS, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
95.66	0.11	0		CORE LOSS	
95.94	0.28	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
98.30	2.36	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
98.35	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
98.70	0.35	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
99.50	0.80	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
99.80	0.30	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.32	0.52	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
104.12	3.80	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
104.71	0.59	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT NON PLANAR.
104.87	0.16	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.04	0.17	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
105.18	0.14	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
105.27	0.09	100	45T11	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
105.33	0.06	100	45T11	100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
105.38	0.05	100		50% COAL, BRIGHT 50% SANDSTONE,MEDIUM GRAINED	BLACK. LIGHT GREY. VERY THINLY BEDDED, BEDS DIP 3 DEG.
105.41	0.03	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.
				NOTE: SHEAR DIRECTION VARIABLE SHEAR DIRECTION VARIABLE	
105.64	0.23	100	45A04	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.76	0.12	100	45A04	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
105.80	0.04	100	45A04	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.86	0.06	100	45A04	90% COAL, DULL 10% COAL, BRIGHT	BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
105.92	0.06	100	45A04	99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.99	0.07	100	45A04	99% MUDSTONE 1% COAL	SILTSTONE, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
106.16	0.17	100	45T12	99% MUDSTONE 1% COAL	SILTSTONE, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS.
106.22	0.06	100	45A04	50% MUDSTONE 50% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
106.35	0.13	100	45A04	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. LENSES, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
106.65	0.30	100	45A04	100% COAL, HEAVY DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
106.92	0.27	100	45A04	99% COAL, DULL 1% MUDSTONE	BADLY BROKEN, BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
106.99	0.07	100	45A04	98% COAL, DULL WITH NUMEROUS BRIGHT BANDS 2% COAL	BLACK. FRIABLE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
107.06	0.07	100	45A04	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
107.17	0.11	100	45A04	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
107.23	0.06	100	45A04	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
107.38	0.15	100	45A04	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
107.44	0.06	100	45A04	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS LOWER 2 : 403.46 M R.L.	
107.50	0.06	100	45A05	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
107.51	0.01	100	45A05	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.54	0.03	100	45A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.66	0.12	100	45A05	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.68	0.02	100	45A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.77	0.09	100	45A05	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.79	0.02	100	45A05	100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
107.80	0.01	100	45A05	100% CARBONACEOUS MUDSTONE	LENSES, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.81	0.01	100	45A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.84	0.03	100	45A05	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.99	0.15	100	45A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.05	0.06	100	45A05	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.08	0.03	100	45A05	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.20	0.12	0	45A05	CORE LOSS	
108.21	0.01	100	45A05	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.22	0.01	100	45A05	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.29	0.07	100	45A05	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.35	0.06	100	45A05	95% COAL, DULL 5% MUDSTONE	BLACK. LENSES, BROWN. WITH VIVIANITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
108.39	0.04	100	45A05	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH VIVIANITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
108.47	0.08	100	45A05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
108.60	0.13	0	45A05	CORE LOSS	
108.75	0.15	100	45A05	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.02	0.27	100	45A05	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.06	0.04	100	45A05	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BROWN-BLACK. LAMINAE, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
109.18	0.12	100	45A05	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.64	0.46	0	45A05	CORE LOSS	
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.20 M; SAMPLED THICKNESS= 2.20 M	
109.79	0.15	100		80% MUDSTONE 10% COAL 10% MUDSTONE	CARBONACEOUS, INTERCALATIONS, DARK BROWN. LENSES, BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.82	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
109.97	0.15	100		90% MUDSTONE 5% CALCITE 5% COAL	GREY-BROWN. LENSES, WHITE. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
110.00	0.03	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
110.03	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
110.17	0.14	100	45T13	60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
110.19	0.02	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
110.46	0.27	100		98% SANDSTONE,MEDIUM GRAINED 2% MUDSTONE	LIGHT GREY. LENSES, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.51	0.05	100		70% COAL 30% SANDSTONE	LENSES, FRAGMENTS, BLACK. MED.-FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
111.51	1.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
111.81	0.30	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
111.98	0.17	100		100% MUDSTONE	SILTSTONE, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
112.56	0.58	100		95% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT BROWN. BANDS, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
112.98	0.42	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
113.09	0.11	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
113.22	0.13	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
113.60	0.38	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	CARBONACEOUS, STREAKS, CREAM. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
114.44	0.84	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY-BROWN. FRAGMENTS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
114.60	0.16	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
114.69	0.09	100		70% CARBONACEOUS MUDSTONE 20% MUDSTONE 10% COAL	BROWN-BLACK. BANDS, STREAKS, GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
114.73	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
114.81	0.08	100		80% CARBONACEOUS MUDSTONE 10% COAL 10% MUDSTONE	BROWN-BLACK. LENSES, BLACK. CARBONACEOUS, LENSES, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
114.85	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
114.96	0.11	100		80% CARBONACEOUS MUDSTONE 10% COAL 10% MUDSTONE	BROWN-BLACK. BANDS, BLACK. CARBONACEOUS, LENSES, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
115.03	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.16	0.13	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.19	0.03	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.21	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.22	0.01	100		50% COAL 50% CALCITE	INTERCALATIONS, BLACK. LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
115.60	0.38	100		70% SILTSTONE 30% MUDSTONE	BANDS, GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	2.82 M	29.33 - 32.15 M	2.82 M
M3	0.00 M	39.38 - 40.43 M	1.05 M
L2	2.20 M	107.44 - 109.64 M	2.20 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
45T01	27.07 - 27.16 M	0.09 M
45T02	27.16 - 27.29 M	0.13 M
45T03	28.45 - 28.59 M	0.14 M
45T04	28.59 - 28.70 M	0.11 M
45T05	28.70 - 28.84 M	0.14 M
45T06	29.09 - 29.19 M	0.10 M
45T07	29.22 - 29.29 M	0.07 M
45A01	29.33 - 29.85 M	0.52 M
45A06	29.85 - 29.92 M	0.07 M
45A02	29.92 - 31.63 M	1.71 M
45A03	31.63 - 32.15 M	0.52 M
45T09	32.93 - 32.98 M	0.05 M
45T10	32.98 - 33.12 M	0.14 M
45T11	105.18 - 105.33 M	0.15 M
45A04	105.41 - 105.99 M	0.58 M
45T12	105.99 - 106.16 M	0.17 M
45A04	106.16 - 107.44 M	1.28 M
45A05	107.44 - 109.64 M	2.20 M
45T13	110.03 - 110.17 M	0.14 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 45A

HOLE TYPE	CORE
EASTING	593,412 M AM GRID
NORTHING	5,401,240 M AM GRID
ELEVATION	510.90 M
TOTAL DEPTH DRILLED	118.44 M
DRILLING STARTED	1/ 6/81
DRILLING TIME	
CORE SIZE	33.5 MM
HOLE SIZE	59.9 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	FORD
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CHIP DESCRIPTION ***	
0.01	0.01	0		CHIP LOSS	
96.31	96.30	0		CHIP LOSS	
					NOTE: GY45 BQ REDRILL OF COAL SECTION BY WEDGING FROM BASE OF HOLE WEDGE PLACED AT 96.2M
				*** CORE DESCRIPTION ***	
97.45	1.14	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.94	0.49	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
97.95	0.01	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
98.18	0.23	100		99% COAL, DULL 1% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
98.24	0.06	0		CORE LOSS	
98.33	0.09	100		99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
98.64	0.31	100		100% SILTSTONE	CARBONACEOUS, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
98.90	0.26	100		90% CARBONACEOUS MUDSTONE 10% SILTSTONE	INTERCALATIONS, BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
99.04	0.14	100		75% CARBONACEOUS MUDSTONE 25% SILTSTONE	SILTSTONE, INTERCALATIONS, BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
99.15	0.11	100		60% SILTSTONE 40% CARBONACEOUS MUDSTONE	BANDS, INTERCALATIONS, LIGHT GREY. BANDS, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
99.99	0.84	100		80% SANDSTONE,MEDIUM GRAINED 19% CARBONACEOUS MUDSTONE 1% COAL	INTERCALATIONS, LIGHT GREY. BANDS, STREAKS, BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED.
104.29	4.30	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED.
104.40	0.11	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
104.57	0.17	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
104.70	0.13	100		100% SANDSTONE,FINE GRAINED	MASSIVE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED.
104.96	0.26	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
				TOP OF DALMAYNE D : 405.94 M R.L.	
105.34	0.38	100	45A06	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 62 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
					NOTE: JOINT AT BASE OF UNIT
				BASE OF DALMAYNE D : THICKNESS= 0.38 M; SAMPLED THICKNESS= 0.38 M	
105.42	0.08	100	45A06	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.43	0.01	100	45A06	70% CARBONACEOUS MUDSTONE 30% COAL	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
105.46	0.03	100	45A06	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.57	0.11	100	45A06	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.60	0.03	100	45A06	80% SILTSTONE 20% MUDSTONE	GREY. UNWEATHERED, MODERATELY WEAK ROCK.
105.69	0.09	100	45A06	100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.72	0.03	100	45A06	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.29	0.57	80	45A06	98% COAL, DULL 2% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK. BANDS, BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
106.48	0.19	0	45A06	CORE LOSS	
106.50	0.02	100	45A06	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.60	0.10	100	45A06	100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
106.62	0.02	100	45A06	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.69	0.07	100	45A06	99% CARBONACEOUS MUDSTONE 1% MUDSTONE	BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
106.77	0.08	100	45A06	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.92	0.15	100	45A06	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 52 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
106.97	0.05	100	45A06	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
106.98	0.01	100	45A06	70% CARBONACEOUS MUDSTONE 30% SANDSTONE,FINE GRAINED	FRAGMENTS, BROWN-BLACK. SILTSTONE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 403.92 M R.L.	
107.04	0.06	100	45A07	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.13	0.09	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
107.18	0.05	100	45A07	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.22	0.04	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
107.25	0.03	100	45A07	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.29	0.04	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.31	0.02	100	45A07	50% MUDSTONE 50% CARBONACEOUS MUDSTONE	SILTSTONE, LIGHT BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
107.35	0.04	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
108.05	0.70		45A07	100% COAL	FRAGMENTS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK. NOTE: LITTLE DRILLING RESISTANCE+SUDDEN DROP IN MUD PRESSURE
				*** CORE DESCRIPTION ***	
108.22	0.17	100	45A07	95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BADLY BROKEN, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
108.28	0.06	100	45A07	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
108.40	0.12	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.41	0.01	100	45A07	80% COAL, DULL 20% SANDSTONE,FINE GRAINED	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.46	0.05	100	45A07	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.47	0.01	100	45A07	80% SILTSTONE 20% COAL, DULL	CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
108.51	0.04	100	45A07	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.67	0.16	100	45A07	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
108.74	0.07	100	45A07	100% COAL, HEAVY DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.84	0.10	100	45A07	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.85	0.01	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.87	0.02	100	45A07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.90	0.03	100	45A07	75% COAL, MID LUSTROUS 25% CARBONACEOUS MUDSTONE	LAMINAE, INTERCALATIONS, BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
108.92	0.02	100	45A07	99% COAL, DULL WITH NUMEROUS BRIGHT BANDS 1% MUDSTONE	BLACK. STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
108.93	0.01	100	45A07	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.95	0.02	100	45A07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.08	0.13	30	45A07	99% COAL, DULL 1% MUDSTONE	BADLY BROKEN, BLACK. STREAKS, CREAM. WITH VIVIANITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
109.21	0.13	100	45A07	98% CARBONACEOUS MUDSTONE 2% COAL	BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.23 M; SAMPLED THICKNESS= 2.23 M					
109.22	0.01	100		100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
109.24	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.33	0.09	100		75% MUDSTONE 20% COAL 5% MUDSTONE	CARBONACEOUS, FOSSILIFERROUS, DARK BROWN. LENSES, STREAKS, BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
109.34	0.01	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.47	0.13	100		60% MUDSTONE 30% MUDSTONE 10% COAL	CARBONACEOUS, BANDS, DARK BROWN. GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 5 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.50	0.03	100		85% MUDSTONE 12% CARBONACEOUS SHALE 3% COAL	DARK GREY. STREAKS, BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.53	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
109.58	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
109.62	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
109.91	0.29	100		85% SILTSTONE 15% MUDSTONE	GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
110.19	0.28	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
110.24	0.05	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY.
111.09	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
111.31	0.22	100		80% MUDSTONE 19% MUDSTONE 1% COAL	CARBONACEOUS, SILTSTONE, DARK GREY. LAMINAE, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
111.40	0.09	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
112.33	0.93	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
112.45	0.12	100		80% CLAYSTONE 20% MUDSTONE	INTERCALATIONS, WHITE. LAMINAE, LIGHT BROWN. UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
112.50	0.05	0		CORE LOSS	
112.66	0.16	100		100% MUDSTONE	DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
112.77	0.11	100		99% SILTSTONE 1% MUDSTONE	DARK BROWN. FRAGMENTS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
113.17	0.40	100		100% SILTSTONE	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
113.50	0.33	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
113.83	0.33	100		68% SILTSTONE 30% MUDSTONE 2% SANDSTONE	GREY-BROWN. GREY-BROWN. MED.-FINE GRAINED, FRAGMENTS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
113.89	0.06	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, WITH VIVIANITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
114.05	0.16	100		70% SILTSTONE 30% MUDSTONE	GREY-BROWN. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
114.12	0.07	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
114.16	0.04	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
114.26	0.10	100		98% MUDSTONE 1% COAL 1% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY. LENSES, BLACK. LENSES. UNWEATHERED, MODERATELY WEAK ROCK.
114.34	0.08	100		60% COAL, DULL 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
114.45	0.11	100		75% MUDSTONE 15% COAL 10% MUDSTONE	CARBONACEOUS, BROWN. BANDS, LENSES, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
114.48	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
114.53	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.67	0.14	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.71	0.04	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.76	0.05	100		80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL	BLACK. CALCITIC, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
114.87	0.11	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.13	0.26	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
115.28	0.15	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	DARK GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
115.32	0.04	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	LAMINAE, INTERCALATIONS, BROWN-BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
115.54	0.22	100		60% CARBONACEOUS SHALE 40% MUDSTONE	MUDSTONE, BANDS, BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
115.69	0.15	100		60% MUDSTONE 40% MUDSTONE	LAMINAE, INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
115.93	0.24	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
115.99	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.21	0.22	100		60% MUDSTONE 40% SILTSTONE	BANDS, INTERCALATIONS, GREY. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.22	0.01	100		100% SANDSTONE,FINE GRAINED	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.46	0.24	100		100% MUDSTONE	LAMINAE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
116.68	0.22	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.72	0.04	100		80% CARBONACEOUS MUDSTONE 20% SILTSTONE	SILTSTONE, BROWN-BLACK. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
116.87	0.15	100		100% MUDSTONE	CAREONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
116.96	0.09	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
117.33	0.37	100		80% SILTSTONE 18% MUDSTONE 2% CARBONACEOUS MUDSTONE	BANDS, LAMINAE, LIGHT GREY. LAMINAE, GREY. STREAKS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.40	0.07	100		100% SILTSTONE	MUDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
117.47	0.07	100		60% SILTSTONE 40% MUDSTONE	CARBONACEOUS, STREAKS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
117.53	0.06	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
117.88	0.35	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, INTERCALATIONS, DARK BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.01	0.13	100		98% MUDSTONE 2% MUDSTONE	CARBONACEOUS, LAMINAE, DARK BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
118.17	0.16	100		85% MUDSTONE 15% MUDSTONE	CARBONACEOUS, DARK BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
118.32	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
118.38	0.06	100		90% SILTSTONE 10% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, LENSES, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
118.44	0.06	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DD	0.38 M	104.96 - 105.34 M	0.38 M
L2	2.23 M	106.98 - 109.21 M	2.23 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
45A06	104.96 - 106.98 M	2.02 M
45A07	106.98 - 109.21 M	2.23 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 46

HOLE TYPE	CORE
EASTING	591,160 M AM GRID
NORTHING	5,401,524 M AM GRID
ELEVATION	527.41 M
TOTAL DEPTH DRILLED	199.57 M
DRILLING STARTED	18/ 5/81
DRILLING TIME	
CORE SIZE	47.6 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
0.01	0.01			100% DOLERITE	SCREE.
68.00	67.99			100% DOLERITE	SCREE.
				*** CHIP DESCRIPTION ***	
70.00	2.00	100		100% SANDSTONE,COARSE GRAINED	GRADING TO, GLAUCONITIC, YELLOW-BROWN, HIGHLY WEATHERED.
				*** CORE DESCRIPTION ***	
70.99	0.99	5		90% MUDSTONE 10% DOLERITE	BADLY BROKEN, GREY. BADLY BROKEN, YELLOW-BROWN. MODERATELY WEATHERED, WEAK ROCK.
71.18	0.19	100		100% SILTSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, WEAK ROCK.
71.20	0.02	100		90% MUDSTONE 10% MUDSTONE	DARK GREY. BANDS, CREAM. MODERATELY WEATHERED, WEAK ROCK.
71.24	0.04	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK.
71.94	0.70	100		100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
71.96	0.02	100		60% CLAYSTONE 40% COAL	BANDS, INTERCALATIONS, CREAM. SOOTY, BLACK. MODERATELY WEATHERED, WEAK ROCK.
72.00	0.04	100		100% CLAYSTONE	YELLOW-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
72.10	0.10	100		100% CLAYSTONE	LIGHT GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
72.92	0.82	100		100% MUDSTONE	ARGILLACEOUS, GREY, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF WEATHERING	
72.95	0.03	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
73.89	0.94	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
74.00	0.11	100		90% MUDSTONE 10% SILTSTONE	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.16	0.16	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.27	0.11	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 11 DEG.
74.31	0.04	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	BANDS, INTERCALATIONS, LIGHT GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 11 DEG.
74.33	0.02	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	BROWN-BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 11 DEG.
74.36	0.03	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	LIGHT GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH MUD PELLETS.
74.54	0.18	100		98% CARBONACEOUS MUDSTONE 2% SANDSTONE,FINE GRAINED	BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
74.72	0.18	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
74.83	0.11	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
75.08	0.25	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.
75.10	0.02	100		100% CLAY	CARBONACEOUS, BLACK, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
75.48	0.38	100		98% COAL, DULL 2% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.
75.57	0.09	100		75% CARBONACEOUS MUDSTONE 25% SILTSTONE	COALY, BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
75.65	0.08	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
75.69	0.04	100		95% CARBONACEOUS MUDSTONE 5% SILTSTONE	BADLY BROKEN, BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.73	0.04	100		70% MUDSTONE 20% CARBONACEOUS MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK BROWN. BANDS, BROWN-BLACK. STREAKS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.88	0.15	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.98	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.33	0.35	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.54	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.
76.67	0.13	100	46T01	100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
				TOP OF MT. NICHOLAS MIDDLE 2 : 450.74 M R.L.	
76.76	0.09	100	46A01	75% CARBONACEOUS MUDSTONE 25% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
76.83	0.07	100	46A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.89	0.06	100	46A01	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
76.91	0.02	100	46A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
76.96	0.05	100	46A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.05	0.09	100	46A01	90% COAL, DULL WITH FEW BRIGHT BANDS 10% MUDSTONE	BLACK. CARBONACEOUS, LENSES, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
77.06	0.01	100	46A01	50% CARBONACEOUS MUDSTONE 50% COAL	LAMINAE, INTERCALATIONS, BROWN-BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
77.21	0.15	100	46A01	90% COAL, MID LUSTROUS 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
77.25	0.04	100	46A01	80% MUDSTONE 20% MUDSTONE	GREY-BROWN. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
77.60	0.35	100	46A01	95% COAL, MID LUSTROUS 5% COAL, BRIGHT	BLACK. STREAKS, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
77.64	0.04	100	46A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.66	0.02	100	46A01	70% COAL, MID LUSTROUS - BRIGHT 30% SILTSTONE	BLACK. BANDS, ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
77.72	0.06	100	46A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.74	0.02	100	46A01	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.78	0.04	100	46A01	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.82	0.04	100	46A01	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.87	0.05	100	46A01	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.92	0.05	100	46A01	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
77.96	0.04	100	46A01	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.00	0.04	100	46A01	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
78.03	0.03	100	46A01	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.36 M; SAMPLED THICKNESS= 1.36 M	
78.10	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.25	0.15	100	46T02	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
78.49	0.24	100		100% MUDSTONE	SILTSTONE, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLOW SLAKING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.69	0.20	100		90% MUDSTONE 10% MUDSTONE	SILTSTONE, GRADING TO, BROWN. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG.
79.63	0.94	100		60% SANDSTONE 35% MUDSTONE 5% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, SILTSTONE, LIGHT GREY. BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 25 DEG., WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
81.59	1.96	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
81.72	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
81.86	0.14	100		75% SANDSTONE,FINE GRAINED 25% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
82.72	0.86	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
84.04	1.32	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS.
85.01	0.97	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS.
85.20	0.19	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
86.07	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
86.44	0.37	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
90.09	3.65	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 45 DEG., WITH CARBONACEOUS WISPS.
90.91	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
91.18	0.27	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 20 DEG.
95.44	4.26	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
95.63	0.19	100		98% SANDSTONE,MEDIUM GRAINED 2% SANDSTONE	LIGHT GREY. FRAGMENTS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
96.17	0.54	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 10 DEG., WITH MUD PELLETS.
96.20	0.03	100		100% SANDSTONE,FINE GRAINED	ARKOSIC, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG.
96.82	0.62	100		99% SANDSTONE 1% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
97.02	0.20	100		99% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG.
97.40	0.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
97.47	0.07	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
101.82	4.35	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
101.96	0.14	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
103.31	1.35	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
104.61	1.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 35 DEG.
104.65	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 8 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
104.77	0.12	100		75% SANDSTONE 25% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG.
104.97	0.20	100		60% SANDSTONE,COARSE GRAINED 20% MUDSTONE 20% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BROWN. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.24	0.27	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., WITH MUD PELLETS.
105.65	0.41	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
106.53	0.88	100		99% SANDSTONE,MEDIUM GRAINED 1% COAL	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., WITH MUD PELLETS.
111.69	5.16	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
111.85	0.16	100		65% SANDSTONE 35% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT NON PLANAR.
112.00	0.15	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
112.14	0.14	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS.
112.74	0.60	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
113.35	0.61	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
114.76	1.41	100		97% SANDSTONE,MEDIUM GRAINED 2% MUDSTONE 1% CARBONACEOUS SHALE	LIGHT GREY. BANDS, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
115.00	0.24	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
115.53	0.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.82	0.29	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
115.92	0.10	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.82	0.90	100		60% SANDSTONE 30% SANDSTONE,COARSE GRAINED 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, LIGHT GREY. LENSES, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 12 DEG.
117.23	0.41	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
119.10	1.87	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.70	0.60	100		50% SANDSTONE,FINE GRAINED 45% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS SHALE	BANDS, LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
120.11	0.41	100		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
121.38	1.27	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 6 DEG.
121.66	0.28	100		99% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
122.22	0.56	100		80% SANDSTONE 19% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
123.95	1.73	100		99% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG.
124.68	0.73	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
125.98	1.30	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	LIGHT GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
127.16	1.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.03	0.87	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.08	0.05	100		75% SANDSTONE 25% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
128.34	0.26	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
128.71	0.37	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.25	0.54	100		70% SANDSTONE 20% MUDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. PELLETAL, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
129.94	0.69	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
130.54	0.60	100		95% SANDSTONE 3% MUDSTONE 2% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
131.32	0.78	100		90% SANDSTONE 10% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
131.50	0.18	100		80% MUDSTONE 20% SANDSTONE	FRAGMENTS, GREY. MED.-FINE GRAINED, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
132.16	0.66	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
132.54	0.38	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS.
133.29	0.75	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
134.15	0.86	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 35 DEG.
134.29	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
134.61	0.32	100		50% SILTSTONE 45% SANDSTONE,FINE GRAINED 5% MUDSTONE	CARBONACEOUS, LAMINAE, GREY. BANDS, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, WITH BURROWING.
134.85	0.24	100		80% SILTSTONE 15% MUDSTONE 5% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
135.01	0.16	100		89% SANDSTONE 10% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	VERY FINE GRAINED, SILTSTONE, LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
135.44	0.43	100		100% MUDSTONE	LAMINAE, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
135.47	0.03	100		100% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
135.56	0.09	100		90% MUDSTONE 10% CARBONACEOUS SHALE	GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
135.94	0.38	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING, WITH CARBONACEOUS WISPS.
136.74	0.80	100		95% SILTSTONE 5% SANDSTONE	LAMINAE, GREY. VERY FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH BURROWING.
137.00	0.26	100		75% SILTSTONE 25% SANDSTONE	LAMINAE, LIGHT GREY. VERY FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
137.45	0.45	100		80% MUDSTONE 20% SILTSTONE	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
137.83	0.38	100		70% SILTSTONE 20% SANDSTONE,FINE GRAINED 10% MUDSTONE	GREY. LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
138.46	0.63	100		55% SILTSTONE 45% SANDSTONE,FINE GRAINED	LIGHT GREY. CARBONACEOUS, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CROSS LAMINATION.
139.58	1.12	100		98% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
139.67	0.09	100		75% SANDSTONE 24% SILTSTONE 1% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
139.83	0.16	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
140.26	0.43	100		70% SANDSTONE,FINE GRAINED 28% SILTSTONE 2% CARBONACEOUS SHALE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. LAMINAE, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
140.62	0.36	100		90% MUDSTONE 10% SILTSTONE	SILTSTONE, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
140.66	0.04	100		80% MUDSTONE 20% CARBONACEOUS SHALE	SILTSTONE, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
140.70	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 13 DEG.
141.37	0.67	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT BROWN. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
141.47	0.10	100		80% SANDSTONE 20% SILTSTONE	MED.-FINE GRAINED, LIGHT BROWN. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
142.00	0.53	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
142.10	0.10	100		95% MUDSTONE 5% CARBONACEOUS SHALE	GREY. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
142.71	0.61	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING.
143.27	0.56	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
143.83	0.56	100		75% SANDSTONE 25% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
144.29	0.46	100		95% SILTSTONE 5% MUDSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.50	0.21	100		80% SANDSTONE,MEDIUM GRAINED 15% SANDSTONE 5% MUDSTONE	LAMINAE, LIGHT GREY. VERY FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
144.70	0.20	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., WITH CROSS LAMINATION.
144.99	0.29	100		50% SILTSTONE 40% SANDSTONE,FINE GRAINED 10% MUDSTONE	LAMINAE, GREY. VERY FINE GRAINED, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CARBONACEOUS WISPS.
145.08	0.09	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
145.51	0.43	100		90% SILTSTONE 10% SANDSTONE	LAMINAE, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG.
147.14	1.63	100		60% SANDSTONE,FINE GRAINED 30% SILTSTONE 10% SANDSTONE,MEDIUM GRAINED	VERY FINE GRAINED, LIGHT GREY. BANDS, INTERCALATIONS, LIGHT BROWN. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
147.28	0.14	100		79% SANDSTONE 20% SANDSTONE 1% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
149.63	2.35	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
149.81	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
149.91	0.10	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, WITH CROSS LAMINATION.
150.47	0.56	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
150.89	0.42	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
151.20	0.31	100		90% SANDSTONE 10% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
151.48	0.28	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
151.98	0.50	100		90% SANDSTONE 7% CARBONACEOUS SHALE 3% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BROWN-BLACK. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
152.44	0.46	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS.
153.28	0.84	100		99% SANDSTONE,MEDIUM GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. FRIABLE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
153.33	0.05	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS SHALE	LIGHT GREY. LATERITIC, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
153.94	0.61	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED	LIGHT GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
154.52	0.58	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.55	6.03	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
163.24	2.69	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
168.40	5.16	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
168.55	0.15	100		75% SANDSTONE 25% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
169.59	1.04	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
170.55	0.96	100		99% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
174.42	3.87	100		99% SANDSTONE 1% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS.
174.78	0.36	100		95% CARBONACEOUS MUDSTONE 5% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
175.50	0.72	100		98% SANDSTONE,FINE GRAINED 2% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
175.54	0.04	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
175.67	0.13	100		95% MUDSTONE 5% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 15 DEG.
175.82	0.15	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	LIGHT GREY. CARBONACEOUS, FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
176.11	0.29	100		90% SILTSTONE 10% SANDSTONE	CARBONACEOUS, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH CROSS LAMINATION.
176.28	0.17	100		75% MUDSTONE 25% MUDSTONE	LAMINAE, GREY. CARBONACEOUS, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
176.32	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
176.40	0.08	100		60% CARBONACEOUS MUDSTONE 40% SILTSTONE	BROWN-BLACK. BANDS, LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH CROSS LAMINATION.
176.44	0.04	100		50% CARBONACEOUS MUDSTONE 40% MUDSTONE 10% SILTSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. LENSES, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
176.66	0.22	100		50% CARBONACEOUS MUDSTONE 50% SANDSTONE	SILTSTONE, BANDS, BROWN-BLACK. VERY FINE GRAINED, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
176.69	0.03	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
176.70	0.01	100		100% CLAYSTONE	LENSES, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
176.86	0.16	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE	BROWN-BLACK. VERY FINE GRAINED, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
176.98	0.12	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.33	0.35	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,FINE GRAINED	BROWN-BLACK. ARKOSIC, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.51	0.18	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS MUDSTONE	ARKOSIC, LIGHT GREY. LUSTROUS, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
177.58	0.07	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE,FINE GRAINED	BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
181.21	3.63	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS.
181.37	0.16	100		70% CARBONACEOUS MUDSTONE 20% CLAYSTONE 10% COAL	BROWN-BLACK. LENSES, CREAM. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
181.40	0.03	100		99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
181.42	0.02	100		100% MUDSTONE	BANDS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING.
181.46	0.04	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
181.70	0.24	100		100% SILTSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
181.90	0.20	100		75% MUDSTONE 25% SANDSTONE,FINE GRAINED	SILTSTONE, GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
181.93	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
181.97	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
182.05	0.08	100		70% MUDSTONE 25% CARBONACEOUS MUDSTONE 5% COAL	CARBONACEOUS, DARK BROWN. BROWN-BLACK. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
182.29	0.24	100		99% MUDSTONE 1% COAL	GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
182.96	0.67	100		90% SILTSTONE 10% SILTSTONE	LIGHT GREY. CALCAREOUS, BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
184.50	1.54	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
184.59	0.09	100		100% MUDSTONE	FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.62	1.03	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
185.86	0.24	100		55% MUDSTONE 45% MUDSTONE	BANDS, INTERCALATIONS, GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
186.21	0.35	100		89% MUDSTONE 10% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. BANDS, GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
186.40	0.19	100		80% CARBONACEOUS MUDSTONE 15% SANDSTONE,FINE GRAINED 5% COAL	BROWN-BLACK. FRAGMENTS, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, WITH MUD PELLETS.
186.86	0.46	100		45% MUDSTONE 45% SILTSTONE 10% MUDSTONE	ARGILLACEOUS, BROWN. BANDS, BROWN. FRAGMENTS, CARBONACEOUS, GREEN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
187.35	0.49	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
187.40	0.05	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, TIGHT NON PLANAR.
187.44	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
187.50	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
187.68	0.18	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
187.70	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
187.73	0.03	100		100% MUDSTONE	ARGILLACEOUS, BROWN, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
188.34	0.61	100		99% CARBONACEOUS MUDSTONE 1% MUDSTONE	FINE GRAINED SANDSTONE, BROWN-BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
188.96	0.62	100		45% CARBONACEOUS MUDSTONE 30% SANDSTONE 25% MUDSTONE	BROWN-BLACK. MED.-FINE GRAINED, LENSES, GREY. CARBONACEOUS, PELLETAL, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH MUD PELLETS.
189.23	0.27	100		99% MUDSTONE 1% COAL	CARBONACEOUS, BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
189.26	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
189.28	0.02	100		95% MUDSTONE 5% CARBONACEOUS SHALE	CREAM. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
189.46	0.18	100		75% MUDSTONE 25% COAL	CARBONACEOUS, DARK BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
189.50	0.04	100		85% CARBONACEOUS MUDSTONE 10% COAL 5% SANDSTONE,FINE GRAINED	BROWN-BLACK. FRAGMENTS, BLACK. FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
189.54	0.04	100		99% CARBONACEOUS MUDSTONE 1% COAL	FINE GRAINED SANDSTONE, BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
189.72	0.18	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
191.03	1.31	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 7 DEG.
191.90	0.87	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
192.64	0.74	100		98% MUDSTONE 2% SILTSTONE	GREEN-BROWN. GREEN-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, WITH DISTURBED BEDDING.
192.94	0.30	100		100% MUDSTONE	SILTSTONE, RED-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
193.46	0.52	100		100% SILTSTONE	VARIAGATED COLOUR, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
193.82	0.36	100		100% SANDSTONE,FINE GRAINED	LIGHT GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
193.95	0.13	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREEN. ARGILLACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
194.37	0.42	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
194.48	0.11	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BROWN-BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
194.58	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
194.83	0.25	100		70% SANDSTONE 30% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREEN. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
195.09	0.26	100		75% SILTSTONE 25% MUDSTONE	GREY-BROWN. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
195.50	0.41	100		55% CARBONACEOUS MUDSTONE 45% MUDSTONE	LAMINAE, BROWN-BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
195.90	0.40	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
196.40	0.50	100		75% MUDSTONE 25% SILTSTONE	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
196.45	0.05	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED.
196.65	0.20	100		80% SILTSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, STREAKS, GREY-BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
197.03	0.38	100		60% MUDSTONE 40% SANDSTONE	GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
197.63	0.60	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
198.97	1.34	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	LAMINAE, BROWN-BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
199.57	0.60	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	BROWN. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	1.36 M	76.67 - 78.03 M	1.36 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
46T01	76.54 - 76.67 M	0.13 M
46A01	76.67 - 78.03 M	1.36 M
46T02	78.10 - 78.25 M	0.15 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 106

HOLE TYPE	CORE
EASTING	590,774 M AM GRID
NORTHING	5,401,837 M AM GRID
ELEVATION	493.28 M
TOTAL DEPTH DRILLED	120.58 M
DRILLING STARTED	3/03/82
DRILLING TIME	06 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
20.50	20.50	60		100% DOLERITE	SCREE, GREY.
25.00	4.50	40		65% MUDSTONE 30% SANDSTONE 5% COAL, DULL	GREY. MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. MODERATELY WEATHERED, FIRM.
25.30	0.30	0		CORE LOSS	
25.47	0.17	100		100% COAL, HEAVY DULL	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
25.60	0.13	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT.
27.92	2.32	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, MODERATELY WEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WIDELY SPACED JOINTS, JOINTS DIP 46 DEG., INFILLED WITH CLAY & TALC.
28.00	0.08	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
28.60	0.60	0		CORE LOSS	
28.79	0.19	100		100% MUDSTONE	SILTSTONE, GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
28.95	0.16	100		93% SANDSTONE 5% MUDSTONE 2% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. BANDS, GREY. STREAKS, BROWN-BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
29.67	0.72	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 53 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
29.84	0.17	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY-BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
29.92	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
30.08	0.16	100		70% COAL, DULL 30% CARBONACEOUS MUDSTONE	FRAGMENTS, BLACK. BANDS, BROWN-BLACK. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
30.22	0.14	100		50% MUDSTONE 50% MUDSTONE	INTERCALATIONS, GREY. CARBONACEOUS, BANDS, BROWN. SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.
30.24	0.05	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.29	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
30.43	0.14	100		100% COAL, DULL WITH FEW BRIGHT BANDS	FRAGMENTS, BLACK, WITH PYRITE ON JOINTS, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
30.59	0.16	100		100% COAL	BLACK, HIGHLY WEATHERED, VERY WEAK ROCK.
31.00	0.41	100		100% MUDSTONE	SANDSTONE, GREY, HIGHLY WEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
32.90	1.90	0		CORE LOSS	
34.00	1.10	100		100% MUDSTONE	SILTSTONE, GREY, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG.
34.88	0.88	0		CORE LOSS	
35.03	0.15	100		98% SILTSTONE 2% MUDSTONE	ARENACEOUS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
35.15	0.12	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
35.25	0.10	100		100% SILTSTONE	MUDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
35.90	0.65	100		100% MUDSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
36.08	0.18	100		100% MUDSTONE	CARBONACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
36.19	0.11	100		90% CARBONACEOUS MUDSTONE 10% CLAYSTONE	BROWN-BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.29	0.10	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
36.36	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
36.50	0.14	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.55	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.

TOP OF MT. NICHOLAS MIDDLE 2 : 456.73 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
36.61	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
36.72	0.11	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.17 M; SAMPLED THICKNESS= 0.00 M	
36.79	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
36.81	0.02	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
37.00	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
37.15	0.15	0		CORE LOSS	
37.42	0.27	100		98% SILTSTONE [illegible]% SILTSTONE 2% CARBONACEOUS SHALE	GREY. BRECCIATED, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
37.62	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
37.80	0.18	0		CORE LOSS	
38.07	0.27	100		100% SHEAR/FAULT ZONE	GREY, UNWEATHERED, WEAK ROCK.
38.14	0.07	100		100% SANDSTONE,MEDIUM GRAINED	BRECCIATED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
38.45	0.31	100		99% SANDSTONE,MEDIUM GRAINED 1% MUDSTONE	GREY. PELLETAL, GREY. WITH CLAY ON JOINTS, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CLAY & TALC, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
38.52	0.07	100		100% SHEAR/FAULT ZONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
39.00	0.48	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
39.26	0.26	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
43.08	3.82	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 68 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.80	0.72	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
44.11	0.31	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CLAY & TALC, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.60	1.49	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, EXTREMELY CLOSELY SPACED JOINTS, INFILLED WITH CLAY & TALC, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
46.09	0.49	100		50% SANDSTONE 25% CARBONACEOUS MUDSTONE 25% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, BROWN-BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
48.88	2.79	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.97	0.09	100		60% SANDSTONE 40% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
49.50	0.53	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 30 DEG., WITH CROSS LAMINATION.
49.59	0.09	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
51.14	1.55	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. MED.-COARSE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 13 DEG.
51.50	0.36	100		98% SANDSTONE 2% CARBONACEOUS SHALE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
51.93	0.43	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
52.00	0.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
53.76	1.76	100		79% SANDSTONE 20% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. MED.-COARSE GRAINED, LENSES, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS.
54.34	0.58	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. MED.-FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 12 DEG.
54.63	0.29	100		85% SANDSTONE,COARSE GRAINED 15% CARBONACEOUS MUDSTONE	CARBONACEOUS, STREAKS, LIGHT GREY. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 14 DEG., WITH MUD PELLETS.
54.88	0.25	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
55.00	0.12	100		99% CARBONACEOUS MUDSTONE 1% SANDSTONE,FINE GRAINED	COALY, LENSES, BROWN-BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
55.09	0.09	100		55% SANDSTONE 44% SANDSTONE,FINE GRAINED 1% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. LIGHT GREY. PELLETAL, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 20 DEG., WITH PLANT REMAINS.
58.16	3.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
58.48	0.32	100		90% PEBBLE CONGLOMERATE 10% SANDSTONE,MEDIUM GRAINED	MUDSTONE, FRAGMENTS, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL.
59.02	0.54	100		100% MUDSTONE	GRADING TO, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
59.13	0.11	100		50% SANDSTONE,MEDIUM GRAINED 50% MUDSTONE	LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
61.22	2.09	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
63.49	2.27	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
63.67	0.18	100		80% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE 5% CARBONACEOUS SHALE	LIGHT GREY. PELLETAL, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.04	0.37	100		95% SANDSTONE 5% MUDSTONE	COARSE GRAINED, LIGHT GREY. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
65.19	1.15	100		80% PEBBLE CONGLOMERATE 20% SANDSTONE	MUDSTONE, FRAGMENTS, GREY. COARSE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
66.38	1.19	100		100% SANDSTONE,COARSE GRAINED	GRADING TO, MEDIUM GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
66.69	0.31	100		95% SANDSTONE 5% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
67.94	1.25	100		99% SANDSTONE 1% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, MODERATELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.45	0.51	100		100% SANDSTONE	VERY COARSE GRAINED, CONGLOMERATIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 7 DEG.
68.49	0.04	100		100% CARBONACEOUS MUDSTONE	ARKOSIC, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
68.98	0.49	100		96% CARBONACEOUS MUDSTONE 2% CLAYSTONE 2% MUDSTONE	COALY, LENSES, BROWN-BLACK. BANDS, LIGHT BROWN. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.05	0.07	100		100% SILTSTONE	CARBONACEOUS, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, WITH MUD PELLETS.
69.13	0.08	100		90% CARBONACEOUS MUDSTONE 10% SILTSTONE	BROWN-BLACK. CARBONACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 20 DEG.
71.40	2.27	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.40	3.00	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH MUD PELLETS, WITH PLANT REMAINS.
74.95	0.55	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.80	3.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS.
79.63	0.83	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS.
81.53	1.90	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
82.36	0.83	100		99% SANDSTONE 1% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 13 DEG.
82.89	0.53	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 22 DEG.
88.85	5.96	100		99% SANDSTONE,COARSE GRAINED 1% MUDSTONE	GRADING TO, MEDIUM GRAINED, LIGHT GREY. COALY, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WITH CARBONACEOUS WISPS.
89.70	0.85	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
90.14	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 6 DEG.
90.27	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.
90.31	0.04	100		100% CARBONACEOUS MUDSTONE	INTERCALATIONS, MUDSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
90.63	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH QUARTZ.
90.83	0.20	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH QUARTZ.
91.31	0.48	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
91.81	0.50	100		60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, BANDS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
92.35	0.54	100		90% MUDSTONE 10% MUDSTONE	GREY. CARBONACEOUS, BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH SLICKENSIDES, JOINTS DIP 32 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
93.10	0.75	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	CARBONACEOUS, LAMINAE, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
93.42	0.32	100		80% SILTSTONE 20% MUDSTONE	INTERCALATIONS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
93.99	0.57	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
94.61	0.62	100		45% SILTSTONE 45% SANDSTONE 10% MUDSTONE	INTERCALATIONS, GREY. VERY FINE GRAINED, BANDS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
94.78	0.17	100		100% SHEAR/FAULT ZONE	MUDSTONE, BRECCIATED, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
95.29	0.51	100		55% SANDSTONE,MEDIUM GRAINED 45% SANDSTONE,FINE GRAINED	BANDS, LIGHT GREY. CARBONACEOUS, STREAKS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 67 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
95.74	0.45	100		60% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED 15% SILTSTONE	BANDS, LENSES, LIGHT GREY. DARK BROWN. LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH DISTURBED BEDDING, WITH PLANT REMAINS.
96.21	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.
97.21	1.00	100		60% SANDSTONE,MEDIUM GRAINED 35% SANDSTONE 5% SILTSTONE	BANDS, LIGHT GREY. MED.-FINE GRAINED, LENSES, LIGHT GREY. CARBONACEOUS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
98.81	1.60	100		95% SANDSTONE 4% SILTSTONE 1% COAL	MED.-FINE GRAINED, LIGHT GREY. LENSES, BANDS, DARK GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
99.80	0.99	100		97% SANDSTONE,MEDIUM GRAINED 2% MUDSTONE 1% CARBONACEOUS SHALE	LIGHT GREY. FRAGMENTS, BANDS. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
100.03	0.23	100		87% SANDSTONE 10% SILTSTONE 3% CARBONACEOUS SHALE	MED.-COARSE GRAINED, LIGHT GREY. BANDS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
100.49	0.46	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE	LAMINAE, INTERCALATIONS, BROWN-BLACK. MED.-FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
100.62	0.13	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
101.05	0.43	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL.
101.62	0.57	100		60% SANDSTONE 30% COAL 10% SILTSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
101.89	0.27	100		75% MUDSTONE 25% COAL	ARKOSIC, GREY. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG., WITH DISTURBED BEDDING.
103.67	1.78	100		69% SANDSTONE 30% SANDSTONE,FINE GRAINED 1% SILTSTONE	VERY FINE GRAINED, GRADING TO, LIGHT GREY. LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
104.30	0.63	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG.
106.54	2.24	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS.
106.94	0.40	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG.
107.74	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
108.45	0.71	100		98% SANDSTONE 2% CARBONACEOUS SHALE	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG.
108.86	0.41	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.
108.98	0.12	100	106T1	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
109.09	0.11	100	106T2	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
109.38	0.29	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG.
			TOP OF	MT. NICHOLAS LOWER 2 : 383.90 M R.L.	
109.39	0.01	100	1	50% COAL 50% CARBONACEOUS MUDSTONE	LAMINAE, INTERCALATIONS, BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.40	0.01	100	1	100% COAL, BRIGHT	BANDS, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
109.42	0.02	100	1	80% COAL, DULL WITH FEW BRIGHT BANDS 20% CARBONACEOUS MUDSTONE	PYRITIC, LENSES, BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 72 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.50	0.08	100	1	95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BLACK. LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SHEARING AT BEDDING SEPARATION SURFACE, VERY CLOSELY SPACED JOINTS, JOINTS DIP 72 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.53	0.03	100	2	95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SHEARING AT BEDDING SEPARATION SURFACE, VERY CLOSELY SPACED JOINTS, JOINTS DIP 72 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.55	0.02	100	3	99% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
109.56	0.01	100	3	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK.
109.57	0.01	100	3	100% MUDSTONE	CARBONACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
109.58	0.01	100	3	100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.59	0.01	100	4	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	PYRITIC, BROWN-BLACK. STREAKS, CREAM. WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.60	0.01	100	4	100% COAL, HEAVY DULL	PYRITIC, BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.61	0.01	100	4	100% CARBONACEOUS MUDSTONE	BANDS, PYRITIC, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.67	0.06	100	5	99% COAL, MID LUSTROUS 1% MUDSTONE	PYRITIC, BLACK. LENSES, LIGHT GREY. WITH CALCITE ON JOINTS AND PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.79	0.12	100	5	100% COAL, DULL	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.89	0.10	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	PYRITIC, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
109.90	0.01	100	5	100% COAL, INTERBANDED DULL AND BRIGHT	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.92	0.02	100	5	100% COAL, MID LUSTROUS	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.95	0.03	100	5	100% COAL, MID LUSTROUS - DULL	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.96	0.01	100	5	100% COAL, INTERBANDED DULL AND BRIGHT	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
109.98	0.02	100	5	100% COAL, HEAVY DULL	PYRITIC, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.11	0.13	100	5	100% COAL, DULL	PYRITIC, BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
110.15	0.04	100	5	100% COAL, DULL WITH FEW BRIGHT BANDS	PYRITIC, BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
110.20	0.05	100	5	95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BANDS, BROWN-BLACK. LAMINAE, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
110.21	0.01	100	5	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.28	0.07	100	6	99% COAL, MID LUSTROUS - DULL 1% MUDSTONE	BADLY BROKEN, BLACK. LAMINAE, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
110.35	0.07	100	7	95% COAL, HEAVY DULL 5% MUDSTONE	PYRITIC, BLACK. LENSES, STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.39	0.04	100	8	100% TONSTEIN	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS.
110.42	0.03	100	8	99% COAL, DULL WITH FEW BRIGHT BANDS 1% MUDSTONE	BLACK. STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
110.48	0.06	100	8	99% COAL, MID LUSTROUS 1% MUDSTONE	BLACK. LENSES, CREAM. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
110.56	0.08	100	8	95% COAL, DULL 5% COAL, BRIGHT	BLACK. LENSES, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
110.57	0.01	100	8	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.65	0.08	100	8	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.69	0.04	100	9	100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
110.73	0.04	100	10	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.77	0.04	100	10	100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
110.79	0.02	100	10	85% MUDSTONE 15% COAL, BRIGHT	DARK GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
110.81	0.02	100	11	70% CARBONACEOUS MUDSTONE 15% COAL, BRIGHT 15% MUDSTONE	BROWN-BLACK. LENSES, BLACK. LENSES, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
110.82	0.01	100	11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.84	0.02	100	11	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.86	0.02	100	11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.88	0.02	100	11	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.90	0.02	100	11	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
110.91	0.01	100	12	50% CARBONACEOUS MUDSTONE 30% COAL, BRIGHT 20% MUDSTONE	PYRITIC, BROWN-BLACK. BANDS, BLACK. STREAKS, PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
110.96	0.05	100	12	60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.97	0.01	100	12	50% CARBONACEOUS MUDSTONE 50% COAL, BRIGHT	LAMINAE, INTERCALATIONS, BROWN-BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
110.99	0.02	100	13	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.61 M; SAMPLED THICKNESS= 1.61 M	
111.07	0.08	100	106T3	70% MUDSTONE 30% MUDSTONE	GREY. CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
111.24	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
111.35	0.11	100	106T4	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
111.36	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
111.98	0.62	100		90% SANDSTONE 10% CARBONACEOUS SHALE	VERY FINE GRAINED, BADLY BROKEN, LIGHT GREY. LAMINAE. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION.
113.50	1.52	100		80% SANDSTONE 15% SANDSTONE 5% MUDSTONE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. MED.-FINE GRAINED, BANDS, LIGHT GREY. BANDS, BADLY BROKEN, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
113.75	0.25	100		98% SANDSTONE 2% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CROSS LAMINATION.
113.98	0.23	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
114.26	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG.
114.54	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.81	2.27	100		90% SANDSTONE,MEDIUM GRAINED 9% SANDSTONE 1% MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
117.58	0.77	100		99% SANDSTONE,FINE GRAINED 1% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BEDS DIP 3 DEG.
120.06	2.48	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
120.29	0.23	100		85% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 5% COAL	LIGHT GREY. BANDS, STREAKS. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
120.58	0.29	100		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, LIGHT GREY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	0.00 M	36.55 - 36.72 M	0.17 M
L2	1.61 M	109.38 - 110.99 M	1.61 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
10611	108.86 - 108.98 M	0.12 M
106T2	108.98 - 109.09 M	0.11 M
1	109.38 - 109.50 M	0.12 M
2	109.50 - 109.53 M	0.03 M
3	109.53 - 109.58 M	0.05 M
4	109.58 - 109.61 M	0.03 M
5	109.61 - 110.21 M	0.60 M
6	110.21 - 110.28 M	0.07 M
7	110.28 - 110.35 M	0.07 M
8	110.35 - 110.65 M	0.30 M
9	110.65 - 110.69 M	0.04 M
10	110.69 - 110.79 M	0.10 M
11	110.79 - 110.90 M	0.11 M
12	110.90 - 110.97 M	0.07 M
13	110.97 - 110.99 M	0.02 M
106T3	110.99 - 111.07 M	0.08 M
106T4	111.24 - 111.35 M	0.11 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 108

HOLE TYPE	CORE
EASTING	592,545 M AM GRID
NORTHING	5,402,314 M AM GRID
ELEVATION	456.46 M
TOTAL DEPTH DRILLED	109.14 M
DRILLING STARTED	12/03/82
DRILLING TIME	10 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.05	3.05	10		100% SOIL	ARGILLACEOUS, BROWN.
4.00	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
5.50	1.50	30		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
7.00	1.50	40		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, MODERATELY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
7.35	0.35	0		CORE LOSS	
7.40	0.05	100		60% CARBONACEOUS MUDSTONE 40% CLAYSTONE	LAMINAE, BROWN-BLACK. BROWN. MODERATELY WEATHERED, SOFT, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
7.49	0.09	100		100% CLAYSTONE	GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
7.70	0.21	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
8.80	1.10	100		100% MUDSTONE	ARGILLACEOUS, VARIAGATED COLOUR, MODERATELY WEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
9.24	0.44	100		100% SANDSTONE,FINE GRAINED	VARIAGATED COLOUR, MODERATELY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
9.70	0.46	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
9.84	0.14	100		70% SILTSTONE 30% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY. GREY. SLIGHTLY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
10.00	0.16	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
10.53	0.53	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH NORMAL GRADED BEDDING, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
10.64	0.11	0		CORE LOSS	
10.73	0.09	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
10.84	0.11	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
11.07	0.23	100		70% SANDSTONE,FINE GRAINED 30% CARBONACEOUS MUDSTONE	SILTY, INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.17	0.10	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
11.30	0.13	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
11.41	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
11.63	0.22	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
11.83	0.20	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, VARIAGATED COLOUR. LAMINAE, BROWN-BLACK. VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				BASE OF WEATHERING	
12.90	1.07	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK.
13.50	0.60	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
13.77	0.27	100		100% SANDSTONE,FINE GRAINED	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
14.50	0.73	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
15.90	1.40	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK.
22.00	6.10	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
22.13	0.13	100	108T1	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
22.27	0.14	100	108T2	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
22.43	0.16	100	108T3	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
23.91	1.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT EROSIONAL, WITH CARBONACEOUS WISPS.
24.32	0.41	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
24.51	0.19	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT DEFORMED, BEDS DIP 25 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
24.62	0.11	100		90% SANDSTONE,COARSE GRAINED 10% MUDSTONE	GREY. LENSES, GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT DEFORMED, WITH SLUMP STRUCTURES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
24.73	0.11	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
26.27	1.54	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, WEAK ROCK.
26.62	0.35	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, MODERATELY WEAK ROCK, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS.
27.40	0.78	100		90% SANDSTONE 10% MUDSTONE	MED.-COARSE GRAINED, LITHIC, GREY. LITHIC, PEBBLY, GREY. WEAK ROCK.
27.90	0.50	100		70% SANDSTONE 30% MUDSTONE	MED.-COARSE GRAINED, LITHIC, GREY. LITHIC, PEBBLY, GREY. WEAK ROCK.
28.36	0.46	100		90% MUDSTONE 10% SANDSTONE,COARSE GRAINED	LITHIC, GREY. LENSES, GREY. WEAK ROCK.
28.65	0.29	100		80% SANDSTONE 20% MUDSTONE	MED.-COARSE GRAINED, LITHIC, GREY. LITHIC, PEBBLY, GREY. WEAK ROCK.
29.65	1.00	100		95% SANDSTONE 5% MUDSTONE	MED.-COARSE GRAINED, LITHIC, GREY. LITHIC, PEBBLY, GREY. WEAK ROCK.
30.64	0.99	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 55 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
30.93	0.29	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, MODERATELY STRONG ROCK.
35.97	5.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, WEAK ROCK, BASAL CONTACT EROSIONAL.
36.11	0.14	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, WITH PELLETS OF CALCITE, WEAK ROCK.
36.38	0.27	100		100% CLAYSTONE	GREY-GREEN, WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
36.54	0.16	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY-GREEN.
36.59	0.05	100		70% SANDSTONE,MEDIUM GRAINED 30% CALCITE	INTERCALATIONS, GREY-GREEN. LAMINAE, BROWN-BLACK. WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
36.61	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, WEAK ROCK.
36.63	0.02	100		100% CLAYSTONE	GREY-GREEN, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
36.83	0.20	100		100% COAL, HEAVY DULL	BLACK, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
36.90	0.07	100		80% CARBONACEOUS MUDSTONE 20% CLAYSTONE	BROWN-BLACK. PELLETAL, LIGHT BROWN. WEAK ROCK.
36.92	0.02	100		100% MUDSTONE	BROWN, WEAK ROCK.
37.11	0.19	100		80% CARBONACEOUS MUDSTONE 20% CLAYSTONE	BLACK. PELLETAL, LIGHT BROWN. WITH PYRITE, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
37.24	0.13	100		100% COAL, DULL	BLACK, WEAK ROCK.
37.30	0.06	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, LAMINAE, BROWN. LAMINAE, BROWN-BLACK. WEAK ROCK, THINLY LAMINATED, BEDS DIP 4 DEG.
37.31	0.01	100		100% COAL	SILICEOUS, LENSES, BLACK, WITH PELLETS OF PYRITE, STRONG ROCK.
37.48	0.17	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
38.24	0.76	100		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	INTERCALATIONS, GREY-GREEN. LENSES, PELLETAL, GREY-GREEN. WEAK ROCK, SEPARATION ON ALL/MOST BEDDING SURFACE, WITH NORMAL GRADED BEDDING, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
41.58	3.34	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, WEAK ROCK, WITH NORMAL GRADED BEDDING, WITH PLANT REMAINS.
41.75	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, WEAK ROCK.
41.94	0.19	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, WEAK ROCK, BASAL CONTACT EROSIONAL, WITH NORMAL GRADED BEDDING, WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
42.01	0.07	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	COALY, BLACK. LENSES, BROWN. WEAK ROCK.
42.28	0.27	100		100% CLAYSTONE	FOSSILIFERROUS, GREY, WEAK ROCK, WITH SLUMP STRUCTURES, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.35	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
43.08	0.73	100		100% MUDSTONE	ARGILLACEOUS, GREY, WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
43.22	0.14	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	ARGILLACEOUS, GREY. LENSES, BROWN-BLACK. WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
43.23	0.01	100		100% COAL, DULL	BLACK, WEAK ROCK.
43.30	0.07	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	ARGILLACEOUS, GREY. LENSES, BROWN-BLACK. WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.
43.35	0.05	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
43.40	0.05	0		CORE LOSS	
43.70	0.30	100		100% CLAYSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
44.90	1.20	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.00	0.10	0		CORE LOSS	
45.37	0.37	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.52	0.15	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
45.90	0.38	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
46.00	0.10	0		CORE LOSS	
46.86	0.86	100		95% SANDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
47.53	0.67	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
48.48	0.95	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.64	0.16	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	INTERCALATIONS, GREY. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
48.88	0.24	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.93	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
49.77	0.84	100		98% MUDSTONE 2% MUDSTONE	CARBONACEOUS, STREAKS, DARK GREY. CARBONACEOUS, BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.96	0.19	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	VERY FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
50.10	0.14	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
50.98	0.88	100		60% SILTSTONE 30% SANDSTONE 10% MUDSTONE	INTERCALATIONS, LIGHT GREY. MED.-FINE GRAINED, BANDS, LIGHT GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION, WITH BURROWING.
51.04	0.06	100		100% MUDSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
51.71	0.67	100		70% SILTSTONE 20% SANDSTONE 10% MUDSTONE	ARENACEOUS, LIGHT GREY. MED.-FINE GRAINED, BANDS, LIGHT GREY. LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
52.04	0.33	100		70% SANDSTONE 30% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS, WITH CROSS LAMINATION.
53.34	1.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.
53.43	0.09	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
53.73	0.30	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
53.98	0.25	100		98% MUDSTONE 2% SANDSTONE	CARBONACEOUS, DARK GREY. VERY FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
54.00	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
54.11	0.11	100		100% MUDSTONE	CARBONACEOUS, ARENACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.78	0.67	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
55.11	0.33	100		99% SANDSTONE,FINE GRAINED 1% CARBONACEOUS SHALE	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
55.72	0.61	100		99% SANDSTONE 1% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
56.21	0.49	100		75% SANDSTONE 25% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL, BEDS DIP 15 DEG., WITH CROSS LAMINATION.
58.00	1.79	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
58.15	0.15	100		75% COAL 25% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LAMINAE, BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
59.80	1.65	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
60.94	1.14	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT.
61.25	0.31	100		70% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY. GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH FLAME/PULL STRUCTS, NON SLAKING, NON STICKY.
62.45	1.20	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT EROSIONAL.
63.00	0.55	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	INTERCALATIONS, GREY. GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 4 DEG., WITH PLANT REMAINS.
63.36	0.36	100		90% SANDSTONE,MEDIUM GRAINED 10% SILTSTONE	INTERCALATIONS, GREY. STREAKS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG.
63.52	0.16	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
66.91	3.39	100		99% SANDSTONE,COARSE GRAINED 1% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 4 DEG., WITH PLANT REMAINS.
66.99	0.08	100		90% SANDSTONE,COARSE GRAINED 10% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 4 DEG., WITH MUD PELLETS.
67.22	0.23	0		CORE LOSS	
67.45	0.23	100		90% SANDSTONE,COARSE GRAINED 10% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
67.63	0.18	0	61	CORE LOSS	
67.70	0.07	100	61	100% COAL, DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
67.82	0.12	100	61	100% COAL, HEAVY DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
67.84	0.02	0	61	CORE LOSS	
67.88	0.04	100	62	65% COAL, HEAVY DULL 30% MUDSTONE 5% COAL	SHALY, BLACK. LENSES, BROWN. LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
67.94	0.06	100	62	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
		TOP OF	MT. NICHOLAS LOWER 2 : 388.52 M R.L.		
67.99	0.05	100	63	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
68.04	0.05	100	63	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK.
68.18	0.14	100	63	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.22	0.04	100	63	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK.
68.29	0.07	100	63	97% COAL, DULL 3% COAL, BRIGHT	BLACK. LENSES, BLACK. WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.33	0.04	100	63	98% COAL, DULL 2% MUDSTONE	BLACK. STREAKS, LENSES, BROWN. WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.38	0.05	100	63	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
68.44	0.06	100	63	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK.
68.46	0.02	100	63	92% COAL, DULL WITH NUMEROUS BRIGHT BANDS 8% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.57	0.11	100	63	98% COAL, DULL 2% MUDSTONE	BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.58	0.01	100	64	65% MUDSTONE 35% COAL, DULL	BANDS, LIGHT BROWN. BLACK. UNWEATHERED, WEAK ROCK.
68.70	0.12	100	64	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
68.71	0.01	100	64	75% COAL, BRIGHT 25% COAL, DULL	LAMINAE, BLACK. BLACK. UNWEATHERED, WEAK ROCK.
68.72	0.01	100	64	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK.
68.77	0.05	100	64	99% CARBONACEOUS MUDSTONE 1% MUDSTONE	COALY, BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT.
69.02	0.25	100	65	99% COAL, DULL 1% MUDSTONE	BADLY BROKEN, BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.05	0.03	100	65	99% SANDSTONE,FINE GRAINED 1% COAL	SILTSTONE, LIGHT BROWN. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT.
69.30	0.25	0	65	CORE LOSS	
69.33	0.03	100	65	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
69.38	0.05	100	66	98% CLAYSTONE 2% CARBONACEOUS SHALE	CREAM. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
69.49	0.11	100	67	97% COAL, DULL 3% MUDSTONE	BLACK. STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
69.58	0.09	100	67	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
69.63	0.05	100	67	95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.69	0.06	100	67	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
69.74	0.05	100	68	100% CLAYSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS.
69.84	0.10	100	69	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
69.88	0.04	100	69	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
69.89	0.01	100	69	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
69.90	0.01	100	69	60% COAL, DULL 40% COAL, MID LUSTROUS	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
69.94	0.04	100	69	92% COAL, DULL WITH FEW BRIGHT BANDS 8% COAL, MID LUSTROUS - DULL	BLACK. LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
70.06	0.12	100	69	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.19	0.13	100	69	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.21	0.02	100	70	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.23	0.02	100	70	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, WITH ZEOLITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.24	0.01	100	70	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.26	0.02	100	70	100% COAL, MID LUSTROUS - BRIGHT	BLACK, WITH ZEOLITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.28	0.02	100	70	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.36	0.08	100	70	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.41	0.05	100	70	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.43	0.02	100	70	90% COAL, BRIGHT 10% COAL, DULL	LENSES, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
70.48	0.05	100	70	97% COAL, DULL WITH FEW BRIGHT BANDS 3% MUDSTONE	BLACK. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.50	0.02	100	71	90% CLAYSTONE 10% COAL, BRIGHT	LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
70.53	0.03	80	72	100% CLAYSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
70.63	0.10	0	72	CORE LOSS	
70.64	0.01	100	72	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
70.70	0.06	100	72	97% COAL, MID LUSTROUS - BRIGHT 3% CLAYSTONE	BLACK. FRAGMENTS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.71	0.01	100	72	93% COAL, BRIGHT WITH NUMEROUS DULL BANDS 7% CLAYSTONE	BLACK. FRAGMENTS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.80	0.09	100	72	97% COAL, INTERBANDED DULL AND BRIGHT 3% CLAYSTONE	BLACK. FRAGMENTS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.86 M; SAMPLED THICKNESS= 2.86 M	
70.85	0.05	100		99% MUDSTONE 1% CARBONACEOUS SHALE	SILTSTONE, GREY. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
71.27	0.42	100		95% SANDSTONE 5% MUDSTONE	VERY FINE GRAINED, GREY-BROWN. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.
71.64	0.37	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
71.70	0.06	100		85% CALCITE 15% MUDSTONE	LENSES, CREAM. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
71.79	0.09	100		90% MUDSTONE 10% CALCITE	CARBONACEOUS, BANDS, GREY-BROWN. LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 26 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
71.98	0.19	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
72.18	0.20	100		75% MUDSTONE 20% MUDSTONE 5% MUDSTONE	SILTSTONE, GREY. ARGILLACEOUS, CARBONACEOUS, GREY. ARGILLACEOUS, BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
72.57	0.39	100		50% SILTSTONE 40% SANDSTONE,FINE GRAINED 10% MUDSTONE	GREY. BANDS, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
72.74	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
72.88	0.14	100		50% MUDSTONE 40% SANDSTONE,FINE GRAINED 10% COAL, DULL WITH NUMEROUS BRIGHT BANDS	GREY. LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
72.96	0.08	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
73.10	0.14	100		75% MUDSTONE 25% SILTSTONE	CARBONACEOUS, STREAKS, GREY-BROWN. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
73.57	0.47	100		98% MUDSTONE 2% CARBONACEOUS SHALE	ARGILLACEOUS, GREY. LAMINAE, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 3 DEG.
74.04	0.47	100		90% MUDSTONE 10% MUDSTONE	GREY. ARGILLACEOUS, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
74.07	0.03	100		100% BRECCIA	MUDSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG.
74.33	0.26	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.60	0.27	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.95	0.35	100		75% SILTSTONE 25% MUDSTONE	LAMINAE, INTERCALATIONS, LIGHT GREY. LAMINAE, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
75.39	0.44	100		50% SANDSTONE 45% CARBONACEOUS SHALE 5% MUDSTONE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. LAMINAE, FOSSILIFERROUS, BROWN-BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
75.46	0.07	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
75.66	0.20	100		55% SANDSTONE 45% CARBONACEOUS SHALE	VERY FINE GRAINED, LAMINAE, LIGHT GREY. LAMINAE, FOSSILIFERROUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
76.16	0.50	0		CORE LOSS	
76.49	0.33	100		50% SHEAR/FAULT ZONE 50% SANDSTONE,FINE GRAINED	FINE GRAINED SANDSTONE, FRAGMENTS, GREY. CARBONACEOUS, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
76.91	0.42	100		75% SILTSTONE 25% SANDSTONE	GREY. VERY FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH CROSS LAMINATION.
77.44	0.53	100		98% SANDSTONE,FINE GRAINED 2% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
77.96	0.52	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS SHALE	LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION.
78.09	0.13	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
79.46	1.37	100		100% SANDSTONE	MED.-FINE GRAINED, CALCITIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
79.75	0.29	100		100% SANDSTONE	MED.-COARSE GRAINED, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
80.69	0.94	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.84	0.15	100		95% CARBONACEOUS MUDSTONE 5% SANDSTONE	COALY, LAMINAE, BROWN-BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
81.28	0.44	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
81.45	0.17	100	108T4	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
81.58	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
81.60	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
81.74	0.14	100		100% COAL, DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
81.76	0.02	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
81.91	0.15	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
82.31	0.40	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
82.69	0.38	100		90% SILTSTONE 5% CARBONACEOUS SHALE 5% SANDSTONE	CARBONACEOUS, BROWN-BLACK. LAMINAE, BROWN-BLACK. VERY FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH BURROWING.
82.97	0.28	100		70% SANDSTONE 30% SILTSTONE	MED.-FINE GRAINED, CARBONACEOUS, ORANGE-BROWN. BANDS, CARBONACEOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS, WITH PLANT REMAINS.
83.05	0.08	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
83.22	0.17	100	108T5	100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK.
83.25	0.03	100		100% MUDSTONE	SILTSTONE, FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK.
83.49	0.24	100		70% MUDSTONE 20% MUDSTONE 10% COAL	GREY. CARBONACEOUS, BANDS, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, WEAK ROCK.
83.57	0.08	100		95% MUDSTONE 5% MUDSTONE	ARGILLACEOUS, GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
83.90	0.33	100		100% COAL, DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS m	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
84.03	0.13	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	ARGILLACEOUS, BROWN-BLACK. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.59	0.56	100		100% COAL, DULL	BADLY BROKEN, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.70	0.11	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
84.76	0.06	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
84.94	0.18	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
85.11	0.17	100		75% MUDSTONE 25% CARBONACEOUS SHALE	ARGILLACEOUS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK.
85.16	0.05	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	LAMINAE, BANDS, BROWN-BLACK. LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
85.21	0.05	0		CORE LOSS	
85.57	0.36	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.62	0.05	0		CORE LOSS	
85.70	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.72	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.84	0.12	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.91	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.93	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
85.95	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
86.31	0.36	100		90% SILTSTONE 10% MUDSTONE	GREY-BROWN. ARGILLACEOUS, BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.65	0.34	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
87.24	0.59	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	VERY FINE GRAINED, BANDS, LIGHT GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH NORMAL GRADED BEDDING.
87.65	0.41	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
88.11	0.46	100		95% SILTSTONE 5% MUDSTONE	CARBONACEOUS, STREAKS, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
88.35	0.24	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
88.74	0.39	100		100% SILTSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
88.95	0.21	100		80% MUDSTONE 20% MUDSTONE	SILTSTONE, BROWN. CARBONACEOUS, BANDS, BROWN-BLACK. UNWEATHERED, WEAK ROCK.
89.77	0.82	100		75% SILTSTONE 25% SILTSTONE	CARBONACEOUS, BANDS, BROWN. ARGILLACEOUS, BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
89.84	0.07	100		80% MUDSTONE 20% SILTSTONE	GREY. BANDS, LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
90.19	0.35	100		100% MUDSTONE	CARBONACEOUS, FRAGMENTS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
90.52	0.33	100		55% MUDSTONE 45% MUDSTONE	GREY. CARBONACEOUS, BANDS, DARK BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL.
90.62	0.10	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, STREAKS, BROWN-BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
90.72	0.10	100		100% CARBONACEOUS MUDSTONE	SILTSTONE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
91.17	0.45	100		98% CARBONACEOUS MUDSTONE 2% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
91.28	0.11	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	SILTSTONE, CARBONACEOUS, BROWN-BLACK. LAMINAE, BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
91.45	0.17	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	COALY, LENSES, BROWN-BLACK. CALCAREOUS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
91.64	0.19	100		100% CARBONACEOUS MUDSTONE	INTERCALATIONS, FINE GRAINED SANDSTONE, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
92.11	0.47	100		60% SANDSTONE,FINE GRAINED 39% CARBONACEOUS MUDSTONE 1% COAL	SILTSTONE, INTERCALATIONS, GREY. BANDS, LENSES, BROWN-BLACK. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS.
92.31	0.20	100		74% GRANULE CONGLOMERATE 25% CARBONACEOUS MUDSTONE 1% COAL	MUDSTONE, PELLETAL, LIGHT BROWN. ARENACEOUS, BROWN-BLACK. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS.
92.38	0.07	100		85% CARBONACEOUS MUDSTONE 15% SANDSTONE,FINE GRAINED	LAMINAE, INTERCALATIONS, BROWN-BLACK. VERY FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
92.52	0.14	100		58% SANDSTONE 40% CARBONACEOUS MUDSTONE 2% COAL	MED.-FINE GRAINED, LIGHT GREY. BROWN-BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
92.76	0.24	100		50% CARBONACEOUS MUDSTONE 50% SANDSTONE,FINE GRAINED	INTERCALATIONS. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
92.82	0.06	100		80% SANDSTONE,COARSE GRAINED 10% CARBONACEOUS MUDSTONE 10% COAL	LIGHT GREY. LAMINAE. FRAGMENTS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
93.01	0.19	100		60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE	LIGHT GREY. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
93.35	0.34	100		65% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE 10% COAL	ARKOSIC, LIGHT GREY. CARBONACEOUS, LENSES. FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH DISTURBED BEDDING.
94.20	0.85	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	ARKOSIC, LIGHT GREY. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
98.69	4.49	100		100% SANDSTONE,MEDIUM GRAINED	LIMONITIC, FELDSPATHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
99.27	0.52	100		100% SANDSTONE	MED.-FINE GRAINED, FOSSILIFERROUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
99.80	0.53	100		80% SANDSTONE 10% MUDSTONE 10% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, SILTSTONE, GREY. MUDSTONE, CARBONACEOUS, GREY-BROWN. COALY, FRAGMENTS. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.18	0.38	100		75% SANDSTONE 25% SILTSTONE	VERY FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
100.98	0.80	100		100% SANDSTONE	MED.-FINE GRAINED, FOSSILIFERROUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS.
101.37	0.39	100		55% MUDSTONE 40% MUDSTONE 5% CARBONACEOUS SHALE	ARGILLACEOUS, CARBONACEOUS, GREY. SILTSTONE, CARBONACEOUS. BANDS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
101.75	0.38	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
102.14	0.39	100		96% SILTSTONE 4% CLAYSTONE	GRADING TO, MUDSTONE, GREY. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
102.32	0.18	100		80% CARBONACEOUS MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	BROWN-BLACK. FELDSPATHIC, CARBONACEOUS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 51 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
102.82	0.50	100		98% SILTSTONE 2% CLAYSTONE	LAMINAE, GREY. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 12 DEG., WITH DISTURBED BEDDING, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
104.18	1.36	100		65% SILTSTONE 20% SILTSTONE 15% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN-BLACK. LAMINAE, LIGHT GREY. CARBONACEOUS, BANDS, LIGHT BROWN. UNWEATHERED, WEAK ROCK.
104.45	0.27	100		100% MUDSTONE	CARBONACEOUS, ARGILLACEOUS, BROWN, UNWEATHERED, VERY WEAK ROCK, SHEARING AT BEDDING SEPARATION SURFACE, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
105.50	1.05	100		50% SANDSTONE,FINE GRAINED 40% SILTSTONE 10% MUDSTONE	VERY FINE GRAINED, BANDS, LIGHT GREY. GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH BURROWING.
106.17	0.67	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS.
106.30	0.13	100		90% SILTSTONE 10% MUDSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
106.64	0.34	100		98% MUDSTONE 2% MUDSTONE	SILTSTONE, GREY. ARGILLACEOUS, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
106.98	0.34	100		55% MUDSTONE 45% MUDSTONE	ARGILLACEOUS, INTERCALATIONS, GREY. SILTSTONE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
107.02	0.04	100		50% MUDSTONE 50% MUDSTONE	LAMINAE, INTERCALATIONS. CARBONACEOUS, LAMINAE, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
107.09	0.07	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK BROWN. LENSES, FELDSPATHIC, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
107.37	0.28	100		87% CARBONACEOUS MUDSTONE 10% MUDSTONE 3% SANDSTONE,FINE GRAINED	BROWN-BLACK. LENSES, BANDS, LIGHT BROWN. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
107.48	0.11	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
108.72	1.24	100		100% MUDSTONE	ARGILLACEOUS, BROWN, UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
109.14	0.42	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L2	2.86 M	67.94 - 70.80 M	2.86 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
108T1	22.00 - 22.13 M	0.13 M
108T2	22.13 - 22.27 M	0.14 M
108T3	22.27 - 22.43 M	0.16 M
61	67.45 - 67.84 M	0.39 M
62	67.84 - 67.94 M	0.10 M
63	67.94 - 68.57 M	0.63 M
64	68.57 - 68.77 M	0.20 M
65	68.77 - 69.33 M	0.56 M
66	69.33 - 69.38 M	0.05 M
67	69.38 - 69.69 M	0.31 M
68	69.69 - 69.74 M	0.05 M
69	69.74 - 70.19 M	0.45 M
70	70.19 - 70.48 M	0.29 M
71	70.48 - 70.50 M	0.02 M
72	70.50 - 70.80 M	0.30 M
108T4	81.28 - 81.45 M	0.17 M
108T5	83.05 - 83.22 M	0.17 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 109

HOLE TYPE	CHIP	
EASTING	590,865	M AM GRID
NORTHING	5,398,109	M AM GRID
ELEVATION	351.13	M
TOTAL DEPTH DRILLED	18.30	M
DRILLING STARTED	15/03/82	
DRILLING TIME	01	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	999.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING	6.00	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
6.60	6.60			100% DOLERITE	SCREE, ARGILLACEOUS, GREY-BROWN, WEATHERED TO SOIL.
6.70	0.10			100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED.
7.00	0.30			100% CARBONACEOUS MUDSTONE	COALY, BLACK, HIGHLY WEATHERED.
8.00	1.00			100% MUDSTONE	GREY-BROWN.
		BASE OF WEATHERING			
18.30	10.30			100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 116

HOLE TYPE	CHIP
EASTING	592,265 M AM GRID
NORTHING	5,398,276 M AM GRID
ELEVATION	355.59 M
TOTAL DEPTH DRILLED	25.00 M
DRILLING STARTED	25/03/82
DRILLING TIME	1 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
16.00	16.00			100% DOLERITE	SCREE, HIGHLY WEATHERED.
21.50	5.50			100% SANDSTONE	DOLERITIC, FRAGMENTS, YELLOW-BROWN, MODERATELY WEATHERED.
22.00	0.50			100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
			BASE OF WEATHERING		
25.00	3.00			100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 117

HOLE TYPE	CHIP	
EASTING	590,934	M AM GRID
NORTHING	5,398,189	M AM GRID
ELEVATION	392.75	M
TOTAL DEPTH DRILLED	54.50	M
DRILLING STARTED	25/03/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	40.60	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
12.00	12.00			100% DOLERITE	SCREE, LIGHT BROWN, HIGHLY WEATHERED.
15.30	3.30			100% SANDSTONE	LIGHT BROWN, MODERATELY WEATHERED.
15.40	0.10			100% MUDSTONE	LIGHT BROWN, MODERATELY WEATHERED.
22.90	7.50			100% SANDSTONE	LIGHT BROWN.
		BASE OF WEATHERING			
31.40	8.50			100% SANDSTONE	LIGHT GREY, UNWEATHERED.
32.40	1.00			90% SANDSTONE 10% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED.
34.00	1.60			100% SANDSTONE	LIGHT GREY, UNWEATHERED.
34.10	0.10			100% MUDSTONE	GREY, UNWEATHERED.
35.80	1.70			100% SANDSTONE	LIGHT GREY, UNWEATHERED.
36.40	0.60			50% SANDSTONE 30% MUDSTONE 20% CARBONACEOUS MUDSTONE	LIGHT GREY. GREY. BLACK. UNWEATHERED.
37.40	1.00			60% SANDSTONE 30% MUDSTONE 10% CARBONACEOUS MUDSTONE	LIGHT GREY. GREY. COALY, BLACK. UNWEATHERED.
38.40	1.00			60% SANDSTONE 40% MUDSTONE	LIGHT GREY. CARBONACEOUS, DARK GREY. UNWEATHERED.
40.30	1.90			80% SANDSTONE 20% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED.
40.40	0.10			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
42.20	1.80			75% SANDSTONE 25% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED.
		TOP OF MT. NICHOLAS LOWER 1 : 350.55 M R.L.			
42.40	0.20			80% COAL 20% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED.
43.40	1.00			100% COAL	BLACK, UNWEATHERED.
44.80	1.40			80% COAL 20% MUDSTONE	BLACK. GREY. UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.60 M; SAMPLED THICKNESS= 0.00 M	
46.40	1.60			60% MUDSTONE 40% SANDSTONE	GREY. LIGHT GREY. UNWEATHERED.
48.10	1.70			60% SANDSTONE 40% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED.
				TOP OF MT. NICHOLAS LOWER 2 : 344.65 M R.L.	
49.80	1.70			100% COAL	BLACK, UNWEATHERED.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.70 M; SAMPLED THICKNESS= 0.00 M	
49.90	0.10			80% MUDSTONE 20% SANDSTONE	GREY. GREY. UNWEATHERED.
54.50	4.60			100% SANDSTONE	LIGHT GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	42.20 - 44.80 M	2.60 M
L2	0.00 M	48.10 - 49.80 M	1.70 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 119

HOLE TYPE	CORE
EASTING	590,764 M AM GRID
NORTHING	5,400,973 M AM GRID
ELEVATION	577.65 M
TOTAL DEPTH DRILLED	214.62 M
DRILLING STARTED	25/03/82
DRILLING TIME	17 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
32.26	32.26	50		100% DOLERITE	SCREE, YELLOW-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
34.53	2.27	100		100% SANDSTONE	MED.-FINE GRAINED, YELLOW-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, WITH CROSS LAMINATION.
37.67	3.14	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, YELLOW-BROWN, HIGHLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
39.16	1.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, YELLOW-BROWN, HIGHLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
39.36	0.20	0		CORE LOSS	
39.61	0.25	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, BADLY BROKEN, YELLOW-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
40.35	0.74	0		CORE LOSS	
41.84	1.49	100		94% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 1% SILTSTONE	YELLOW-BROWN. PELLETAL, CREAM. BANDS, LIGHT GREY. HIGHLY WEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
41.98	0.14	100		80% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE 5% CARBONACEOUS SHALE	YELLOW-GREY. FRAGMENTS, CREAM. STREAKS, BROWN-BLACK. MODERATELY WEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT.
42.33	0.35	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
42.43	0.10	100		85% SANDSTONE 15% COAL	MED.-COARSE GRAINED, ORANGE-YELLOW. LENSES, BLACK. HIGHLY WEATHERED.
42.63	0.20	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-COARSE GRAINED, BADLY BROKEN, GREY. STREAKS, BROWN-BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT.
42.68	0.05	100		100% CLAYSTONE	CARBONACEOUS, STREAKS, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
42.73	0.05	100		100% COAL, DULL	BADLY BROKEN, BLACK, HIGHLY WEATHERED, WEAK ROCK.
42.78	0.05	100		100% CLAYSTONE	CREAM, HIGHLY WEATHERED, VERY WEAK ROCK.
43.45	0.67	0		CORE LOSS	
43.50	0.05	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
43.51	0.01	100		100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
43.64	0.13	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
43.86	0.22	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
43.87	0.01	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
43.91	0.04	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
43.93	0.02	100		85% COAL, DULL WITH NUMEROUS BRIGHT BANDS 15% COAL, BRIGHT	BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK.
43.96	0.03	100		60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	BROWN-BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK.
44.42	0.46	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
44.73	0.31	100		55% MUDSTONE 45% CARBONACEOUS SHALE	LAMINAE, INTERCALATIONS, GREY. MUDSTONE, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
44.90	0.17	100		45% MUDSTONE 35% CARBONACEOUS SHALE 20% BRECCIA	LAMINAE, INTERCALATIONS, GREY. MUDSTONE, LAMINAE, BROWN. MUDSTONE, GREY. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.20	0.30	100		90% MUDSTONE 10% BRECCIA	GREY. MUDSTONE, GREY. WITH CLAY ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
45.48	0.28	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
46.35	0.87	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
46.45	0.10	0		CORE LOSS	
46.47	0.02	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
46.71	0.24	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.91	0.20	0		CORE LOSS	
47.16	0.25	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
47.38	0.22	0		CORE LOSS	
47.71	0.33	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
48.02	0.31	0		CORE LOSS	
48.04	0.02	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
48.09	0.05	100		100% CLAY	BLACK, UNWEATHERED, VERY WEAK ROCK.
48.23	0.14	100		98% MUDSTONE 2% COAL	CARBONACEOUS, BROWN. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
48.40	0.17	100		100% MUDSTONE	SILTSTONE, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
48.55	0.15	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
48.61	0.06	0		CORE LOSS	
48.69	0.08	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT.
48.72	0.03	100		80% CARBONACEOUS MUDSTONE 20% CLAYSTONE	BROWN-BLACK. BANDS, LIGHT BROWN. UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT.
48.94	0.22	100		75% CLAYSTONE 25% CLAY	CREAM. CARBONACEOUS, BROWN. UNWEATHERED, VERY WEAK ROCK.
49.08	0.14	100		90% CARBONACEOUS MUDSTONE 10% CLAYSTONE	BADLY BROKEN, BROWN-BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
49.30	0.22	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT.
49.46	0.16	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.50	0.04	100		100% SILTSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.90	0.40	100		99% MUDSTONE 1% COAL	SILTSTONE, CARBONACEOUS, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
49.95	0.05	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	CARBONACEOUS, BROWN. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
50.04	0.09	30		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
50.27	0.23	0		CORE LOSS	
50.69	0.42	80		70% SANDSTONE 30% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, ARKOSIC, BROWN. FRAGMENTS, PELLETAL, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
50.77	0.08	50		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK.
51.17	0.40	100		93% SANDSTONE 5% CLAY 2% CALCITE	VERY FINE GRAINED, CREAM. BANDS, CREAM. STREAKS, WHITE. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 10 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
51.39	0.22	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, CREAM, UNWEATHERED, WEAK ROCK.
51.85	0.46	0		CORE LOSS	
51.92	0.07	90		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK.
52.09	0.17	100		100% SILTSTONE	GREY, WITH LIMONITE ON JOINTS AND CHLORITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
52.35	0.26	100		100% SILTSTONE	CARBONACEOUS, STREAKS, WHITE, WITH CHLORITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
52.45	0.10	0		CORE LOSS	
52.55	0.10	100		100% SILTSTONE	WHITE, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
52.61	0.06	100		100% SILTSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
52.63	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.66	0.03	100		90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. CARBONACEOUS, STREAKS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
52.74	0.08	90		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
52.75	0.01	100		100% CLAYSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, VERY WEAK ROCK.
52.78	0.03	100		75% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE	WHITE. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
52.93	0.15	100		90% CARBONACEOUS MUDSTONE 5% COAL 5% SANDSTONE,FINE GRAINED	BROWN-BLACK. LENSES, BLACK. STREAKS, LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
52.96	0.03	100		80% MUDSTONE 20% COAL	CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
53.12	0.16	90		95% MUDSTONE 5% CARBONACEOUS SHALE	BROWN. STREAKS, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
53.17	0.05	30		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
53.27	0.10	0		CORE LOSS	
53.34	0.07	70		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
53.46	0.12	100		100% COAL, HEAVY DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
54.28	0.82	0		CORE LOSS	
54.37	0.09	95		100% CARBONACEOUS MUDSTONE	MUDSTONE, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
55.20	0.83	0		CORE LOSS	
55.35	0.15	20		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BADLY BROKEN, BROWN-BLACK. CARBONACEOUS, BADLY BROKEN, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
55.55	0.20	0		CORE LOSS	
55.75	0.20	70		95% CARBONACEOUS MUDSTONE 5% SANDSTONE,FINE GRAINED	BADLY BROKEN, BROWN-BLACK. MUDSTONE, PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
55.79	0.04	80		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	BADLY BROKEN, CREAM. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
55.99	0.20	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
56.07	0.08	80		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, GRADING TO, DARK BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
56.11	0.04	80		100% CLAYSTONE	BADLY BROKEN, CREAM, UNWEATHERED.
56.56	0.45	0		CORE LOSS	
56.64	0.08	60		88% COAL, HEAVY DULL 10% CARBONACEOUS MUDSTONE 2% SANDSTONE,FINE GRAINED	BADLY BROKEN, BLACK. BROWN-BLACK. LENSES, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
57.09	0.45	0		CORE LOSS	
57.21	0.12	40		100% CLAYSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
58.30	1.09	20		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	COALY, BADLY BROKEN, BROWN-BLACK. SILTSTONE, BADLY BROKEN, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
58.40	0.10	100		100% SILTSTONE	LAMINAE, BADLY BROKEN, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
59.10	0.70	0		CORE LOSS	
59.12	0.02	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
59.23	0.11	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK.
59.43	0.20	0		CORE LOSS	
59.52	0.09	100		95% MUDSTONE 5% CARBONACEOUS SHALE	CARBONACEOUS. FRAGMENTS, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
59.72	0.20	50		70% COAL, HEAVY DULL 30% CLAYSTONE	BADLY BROKEN, BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
61.48	1.76	0		CORE LOSS	
61.51	0.03	100		100% SILTSTONE	CARBONACEOUS, BADLY BROKEN, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
61.60	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
61.74	0.14	100		60% CARBONACEOUS MUDSTONE 30% MUDSTONE 10% CLAYSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
61.78	0.04	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
61.90	0.12	100		60% CARBONACEOUS MUDSTONE 25% COAL, HEAVY DULL 15% CLAYSTONE	BROWN-BLACK. BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
62.00	0.10	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK BROWN. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.10	0.10	0		CORE LOSS	
62.12	0.02	70		100% CLAYSTONE	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
62.28	0.16	100		99% COAL, HEAVY DULL 1% MUDSTONE	BLACK. CARBONACEOUS, STREAKS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.38	0.10	0		CORE LOSS	
62.46	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.54	0.08	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.72	0.18	100		55% COAL, HEAVY DULL 45% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.91	0.19	100		75% MUDSTONE 20% COAL, BRIGHT 5% MUDSTONE	CARBONACEOUS, DARK BROWN. BANDS, LENSES, BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
62.97	0.06	100		100% MUDSTONE	ARGILLACEOUS, ARENACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
63.20	0.23	100		70% CARBONACEOUS MUDSTONE 20% MUDSTONE 10% MUDSTONE	BROWN-BLACK. GREY. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
63.23	0.03	100		100% CLAY	CARBONACEOUS, BROWN, UNWEATHERED, VERY WEAK ROCK.
63.66	0.43	0		CORE LOSS	
63.74	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
63.99	0.25	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.16	0.17	100		85% CARBONACEOUS MUDSTONE 10% CLAYSTONE 5% MUDSTONE	BROWN-BLACK. BANDS, LIGHT BROWN. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.26	0.10	100		100% MUDSTONE	LATERITIC, NODULES, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
64.42	0.16	100		85% CARBONACEOUS MUDSTONE 15% COAL	BROWN-BLACK. BANDS, BLACK. WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.37	0.95	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SHEARING AT BEDDING SEPARATION SURFACE, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.63	0.26	100		80% MUDSTONE 15% MUDSTONE 5% COAL	CARBONACEOUS, CALCITIC, DARK BROWN. BANDS, GREY. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
65.86	0.23	100		100% MUDSTONE	SILTSTONE, GREY, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
66.09	0.23	100		90% MUDSTONE 10% CLAYSTONE	GREY. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
66.36	0.27	100		70% CLAYSTONE 20% MUDSTONE 10% CARBONACEOUS MUDSTONE	CALCITIC, CREAM. GREY. COALY, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
66.44	0.08	100		100% MUDSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
66.77	0.33	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION.
67.08	0.31	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
67.14	0.06	100		100% MUDSTONE	ARGILLACEOUS, CARBONACEOUS, ORANGE-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
67.23	0.09	0		CORE LOSS	
67.27	0.04	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
67.36	0.09	100		100% CARBONACEOUS MUDSTONE	ARGILLACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
67.57	0.21	100		100% MUDSTONE	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
68.89	1.32	100		80% MUDSTONE 20% MUDSTONE	SILTY, INTERCALATIONS, DARK BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, MODERATELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.39	1.50	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
70.86	0.47	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
71.91	1.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
72.36	0.45	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
72.87	0.51	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
73.60	0.73	100		70% MUDSTONE 25% MUDSTONE 5% COAL	GREY. CARBONACEOUS, DARK BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
73.80	0.20	0		CORE LOSS	
74.18	0.38	100		65% MUDSTONE 25% SANDSTONE 10% MUDSTONE	CARBONACEOUS, BANDS, DARK BROWN. MED.-FINE GRAINED, LENSES, LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
74.25	0.07	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
74.38	0.13	0		CORE LOSS	
74.50	0.12	100		80% MUDSTONE 20% MUDSTONE	GREY. BRECCIATED, ARGILLACEOUS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.65	0.15	100		95% MUDSTONE 5% CLAYSTONE	DARK GREY. LAMINAE, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SHEARING AT BEDDING SEPARATION SURFACE, CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
75.04	0.39	100		85% MUDSTONE 15% MUDSTONE	CARBONACEOUS, DARK BROWN. SILTSTONE, LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
75.31	0.27	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
75.60	0.29	100		100% SILTSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
76.13	0.53	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
76.34	0.21	100		70% SANDSTONE 30% MUDSTONE	VERY FINE GRAINED, SILTSTONE, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC.
76.58	0.24	100		95% SANDSTONE 5% CARBONACEOUS SHALE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION.
76.89	0.31	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
77.33	0.44	100		55% MUDSTONE 45% MUDSTONE	LAMINAE, INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
77.46	0.13	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
77.48	0.02	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
77.80	0.32	100		100% CARBONACEOUS MUDSTONE	MUDSTONE, STREAKS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
77.82	0.02	0		CORE LOSS	
78.60	0.78	100		55% MUDSTONE 45% MUDSTONE	LAMINAE, INTERCALATIONS, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
78.72	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
79.06	0.34	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, LAMINAE, DARK BROWN. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.59	0.53	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK BROWN. GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.69	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
79.72	0.03	70		100% CLAYSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
80.27	0.55	100		90% MUDSTONE 10% SILTSTONE	CARBONACEOUS, DARK BROWN. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
80.42	0.15	100		95% MUDSTONE 4% MUDSTONE 1% COAL	CARBONACEOUS, DARK BROWN. PELLETAL, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL.
81.11	0.69	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, DARK BROWN. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
81.17	0.06	100		100% CLAYSTONE	CALCITIC, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
81.35	0.18	100		75% CLAYSTONE 20% MUDSTONE 5% MUDSTONE	LIGHT BROWN. CARBONACEOUS, LENSES, DARK BROWN. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
81.53	0.18	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	BROWN-BLACK. ARENACEOUS, BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
81.65	0.12	100		98% CLAYSTONE 2% CARBONACEOUS SHALE	LIGHT BROWN. FRAGMENTS, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
82.06	0.41	100		70% CARBONACEOUS MUDSTONE 20% MUDSTONE 10% MUDSTONE	COALY, LENSES, BROWN-BLACK. CARBONACEOUS, BROWN. SILTSTONE, BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
82.68	0.62	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
82.98	0.30	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
83.03	0.05	0		CORE LOSS	
83.42	0.39	100		99% MUDSTONE 1% CARBONACEOUS SHALE	GREY. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
83.54	0.12	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
83.94	0.40	0		CORE LOSS	
84.26	0.32	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	GREY. VERY FINE GRAINED, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
84.67	0.41	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
84.98	0.31	80		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.04	0.06	100		100% CLAYSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS UPPER 8 : 492.61 M R.L.	
85.20	0.16	70		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.25	0.05	60		100% COAL	FRAGMENTS, ARGILLACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.21 M; SAMPLED THICKNESS= 0.00 M	
85.30	0.05	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.47	0.17	100		80% CARBONACEOUS MUDSTONE 10% MUDSTONE 10% CLAYSTONE	COALY, LENSES, BROWN-BLACK. CARBONACEOUS, BROWN. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
85.90	0.43	100		100% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
86.00	0.10	100		100% SILTSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS.
86.49	0.49	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, LIGHT GREY. SILTY, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
87.37	0.88	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
87.83	0.46	100		100% MUDSTONE	SILTY, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
89.10	1.27	100		100% CLAYSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, WITH VARVING.
89.23	0.13	100		100% CLAYSTONE	LAMINAE, ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLOW SLAKING.
89.28	0.05	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 40 DEG.. TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
89.32	0.04	100		60% LIMESTONE 40% CLAYSTONE	LENSES, WHITE. LIGHT BROWN. UNWEATHERED, WEAK ROCK.
89.62	0.30	100		100% CLAYSTONE	GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS.
91.30	1.68	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, CLOSELY SPACED JOINTS.
91.42	0.12	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS.
93.23	1.81	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 15 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, CLOSELY SPACED JOINTS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
94.05	0.82	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, CLOSELY SPACED JOINTS.
94.62	0.57	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, CLOSELY SPACED JOINTS.
94.95	0.33	100		70% SANDSTONE,FINE GRAINED 30% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY. INTERCALATIONS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS.
96.30	1.35	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
97.50	1.20	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.75	4.25	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS.
101.84	0.09	100		60% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED 10% CALCITE	LENSES, PELLETAL, GREY. LITHIC, GREY. LENSES, WHITE. WITH CALCITE ON BEDDING PLANES, UNWEATHERED, MODERATELY WEAK ROCK.
103.60	1.76	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS.
103.81	0.21	100		75% SANDSTONE,FINE GRAINED 25% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
104.09	0.28	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
104.17	0.08	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
104.53	0.36	100		55% SANDSTONE,FINE GRAINED 45% SILTSTONE	LIGHT GREY. LAMINAE, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
107.34	2.81	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
107.90	0.56	100		90% SANDSTONE 10% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
108.18	0.28	100		85% MUDSTONE 10% CARBONACEOUS MUDSTONE 5% SANDSTONE,MEDIUM GRAINED	FRAGMENTS, LENSES, GREY. FRAGMENTS, LENSES, DARK GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
108.54	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
109.07	0.53	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
109.68	0.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
110.26	0.58	75		75% MUDSTONE 25% SILTSTONE	MASSIVE, GREY. MASSIVE, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
110.50	0.24	100		75% SANDSTONE,FINE GRAINED 15% COAL 10% SILTSTONE	LIGHT GREY. LAMINAE, BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
110.68	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
110.82	0.14	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., SLIGHT PERMIABILITY.
111.35	0.53	100		80% SANDSTONE 10% COAL 10% SILTSTONE	MED.-COARSE GRAINED, LIGHT GREY. LAMINAE, BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
111.62	0.27	100		70% MUDSTONE 20% SILTSTONE 10% SANDSTONE,FINE GRAINED	GREY. GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
111.67	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
111.95	0.28	100		55% MUDSTONE 40% SANDSTONE 5% COAL	GREY. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.33	0.38	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.40	0.07	100		60% MUDSTONE 40% MUDSTONE	GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.53	0.13	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.62	0.09	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	GREY. BANDS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.65	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.66	0.01	100		55% COAL, DULL 45% CLAYSTONE	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.67	0.01	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.68	0.01	100		55% COAL, DULL 45% TONSTEIN	BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
112.86	0.18	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
113.00	0.14	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
113.14	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.23	2.09	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
115.30	0.07	100		80% SANDSTONE 10% COAL 10% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
115.32	0.02	100	1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.48	0.16	100	1	100% CLAYSTONE	TUFFACEOUS, LIGHT BROWN, WITH STREAKS OF CALCITE, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, SLIGHT PERMIABILITY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 462.17 M R.L.	
115.62	0.14	100	2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.63	0.01	100	3	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.77	0.14	100	3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.80	0.03	100	3	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., RAPID SLAKING, SLIGHT PERMIABILITY.
115.82	0.02	100	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.89	0.07	100	3	75% SANDSTONE,FINE GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.92	0.03	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
115.93	0.01	100	4	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
116.07	0.14	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
116.26	0.19	100	4	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.78 M; SAMPLED THICKNESS= 0.78 M	
116.33	0.07	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
116.74	0.41	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
116.89	0.15	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.49	0.60	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
118.73	1.24	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
119.10	0.37	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
119.41	0.31	100		60% SILTSTONE 40% SANDSTONE,FINE GRAINED	GREY. SILTSTONE, LAMINAE, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
119.65	0.24	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
120.75	1.10	100		60% MUDSTONE 40% SILTSTONE	SILTSTONE, BANDS, GREY. MUDSTONE, BANDS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
121.23	0.48	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
121.29	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
121.95	0.66	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
122.03	0.08	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
122.13	0.10	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
122.38	0.25	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
122.43	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
122.46	0.03	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
122.66	0.20	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
123.29	0.63	100		70% MUDSTONE 25% CARBONACEOUS MUDSTONE 5% COAL	GREY. BANDS, LENSES, BROWN-BLACK. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
123.46	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
123.53	0.07	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
123.83	0.30	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
123.89	0.06	100		60% CALCITE 40% SANDSTONE,FINE GRAINED	LENSES, FRAGMENTS, WHITE. GREY. WITH STREAKS OF CALCITE, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
124.20	0.31	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
125.24	1.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
125.26	0.02	100		100% SANDSTONE	BANDS, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
125.76	0.50	100		80% SILTSTONE 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK. CARBONACEOUS, LENSES, DARK GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
126.29	0.53	100		85% COAL, DULL 15% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
127.35	1.06	100		100% SILTSTONE	CARBONACEOUS, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
127.62	0.27	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.04	0.42	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, MUDSTONE, GREY. BANDS, LENSES, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
128.18	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.
128.33	0.15	100	T1	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.
128.47	0.14	100	T2	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.
128.56	0.09	100	T3	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
128.58	0.02	100		75% MUDSTONE 25% COAL	GREY. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 449.07 M R.L.	
128.59	0.01	100	21	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.60	0.01	100	21	50% COAL, BRIGHT 50% COAL, DULL	BLACK. BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.64	0.04	100	21	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.67	0.03	100	21	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.71	0.04	100	21	100% CLAYSTONE	COALY, STREAKS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
128.72	0.01	100	22	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.11	0.39	100	22	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.13	0.02	100	22	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.18	0.05	100	23	100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
129.39	0.21	100	24	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.47	0.08	100	24	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.60	0.13	100	24	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
129.70	0.10	100	25	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
129.77	0.07	100	26	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.19 M; SAMPLED THICKNESS= 1.19 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
129.84	0.07	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
130.10	0.26	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, LIGHT BROWN. COALY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
130.30	0.20	100		100% SANDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
131.01	0.71	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
131.18	0.17	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
134.93	3.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
135.33	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, WHITE, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., EFFECTIVELY IMPERMIABLE.
136.14	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
136.63	0.49	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
138.54	1.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
138.90	0.36	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., EFFECTIVELY IMPERMIABLE.
139.60	0.70	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
140.54	0.94	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
140.91	0.37	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
141.01	0.10	100		85% SANDSTONE,MEDIUM GRAINED 15% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
150.36	9.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
150.57	0.21	100		95% CARBONACEOUS MUDSTONE 5% SANDSTONE,MEDIUM GRAINED	LENSES, BROWN-BLACK. LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
151.20	0.63	100		95% SANDSTONE,MEDIUM GRAINED 5% LITHIC	LIGHT GREY. FRAGMENTS, GREY-GREEN. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
151.55	0.35	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
152.04	0.49	100		65% SANDSTONE,FINE GRAINED 20% SILTSTONE 15% COAL	LIGHT GREY. BANDS, LENSES, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, WITH CROSS LAMINATION, EFFECTIVELY IMPERMIABLE.
152.49	0.45	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
152.86	0.37	100		95% SANDSTONE,FINE GRAINED 5% COAL	SILTSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 8 DEG., EFFECTIVELY IMPERMIABLE.
153.50	0.64	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
153.65	0.15	100		75% SANDSTONE 20% COAL 5% SANDSTONE,FINE GRAINED	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. LENSES, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
153.84	0.19	100		70% SANDSTONE,FINE GRAINED 30% COAL	GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
154.60	0.76	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
157.55	2.95	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
157.75	0.20	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
158.01	0.26	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
158.26	0.25	100		65% SANDSTONE 20% COAL 15% SILTSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
158.80	0.54	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, EFFECTIVELY IMPERMIABLE.
161.19	2.39	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
161.20	0.01	100		100% COAL	BANDS, BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
161.23	0.03	100		75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
165.58	4.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
166.16	0.58	100		100% SANDSTONE,MEDIUM GRAINED	COALY, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
166.51	0.35	100		100% SANDSTONE,COARSE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
166.57	0.06	100		100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
166.62	0.05	100		55% SANDSTONE,COARSE GRAINED 45% MUDSTONE	LIGHT GREY. FRAGMENTS, LENSES, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
167.70	1.08	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
167.96	0.26	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
168.33	0.37	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
169.50	1.17	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.78	1.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
171.24	0.46	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
171.70	0.46	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
171.80	0.10	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
176.80	5.00	100		80% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE	MASSIVE, LIGHT GREY. MED.-COARSE GRAINED, LIGHT GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, EFFECTIVELY IMPERMIABLE.
177.68	0.88	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, EFFECTIVELY IMPERMIABLE.
177.82	0.14	100		90% CARBONACEOUS MUDSTONE 10% COAL, DULL	BLACK. BLACK. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
177.97	0.15	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.07	0.10	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.27	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.38	0.11	100		100% SANDSTONE,MEDIUM GRAINED	COALY, STREAKS, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.45	0.07	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
178.48	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.95	0.47	100		60% SILTSTONE 30% MUDSTONE 10% COAL	BADLY BROKEN, GREY. BANDS, BADLY BROKEN, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
178.99	0.04	100		100% CARBONACEOUS MUDSTONE	LENSES, BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
179.77	0.78	100		80% MUDSTONE 20% SANDSTONE	FRAGMENTS, LENSES, GREY. MED.-COARSE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
180.12	0.35	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
180.17	0.05	100		100% COAL	BANDS, BLACK, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
180.45	0.28	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
181.00	0.55	100		95% MUDSTONE 5% SANDSTONE,MEDIUM GRAINED	GREY. LENSES, LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
181.60	0.60	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
181.96	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
182.49	0.53	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, EFFECTIVELY IMPERMIABLE.
183.59	1.10	100		75% SANDSTONE 25% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, EFFECTIVELY IMPERMIABLE.
184.17	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
184.76	0.59	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, EFFECTIVELY IMPERMIABLE.
185.05	0.29	100		85% SANDSTONE 15% COAL	MED.-FINE GRAINED, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, EFFECTIVELY IMPERMIABLE.
185.34	0.29	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
185.53	0.19	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
186.72	1.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
186.84	0.12	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY. LENSES, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
186.96	0.12	90		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
187.82	0.86	100		60% SILTSTONE 35% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. BANDS, GREY. LENSES, FRAGMENTS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS, SLIGHT PERMIABILITY.
188.02	0.20	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, MUDSTONE, GREY. BANDS, GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
188.46	0.44	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
188.68	0.22	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
189.14	0.46	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
189.44	0.30	100		100% MUDSTONE	SILTSTONE, LENSES, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
189.80	0.36	100		100% MUDSTONE	INTERCALATIONS, SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.06	0.26	100		100% SILTSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
190.23	0.17	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
190.50	0.27	100		90% MUDSTONE 10% COAL	SILTSTONE, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
190.75	0.25	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
190.98	0.23	100		80% MUDSTONE 20% COAL	GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
191.14	0.16	100		100% MUDSTONE	SILTSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
191.60	0.46	100		50% SILTSTONE 40% SANDSTONE,FINE GRAINED 10% COAL	INTERCALATIONS, FINE GRAINED SANDSTONE, GREY. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
192.12	0.52	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
192.15	0.03	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
192.38	0.23	100		90% MUDSTONE 10% COAL	GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
192.51	0.13	100		100% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
192.66	0.15	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
192.81	0.15	100		100% SANDSTONE,FINE GRAINED	INTERCALATIONS, SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
192.93	0.12	100		65% SANDSTONE 20% COAL 15% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. LENSES, BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
193.06	0.13	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
193.42	0.36	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, SILTSTONE, GREY. BANDS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
193.61	0.19	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
193.92	0.31	100		55% SILTSTONE 45% SANDSTONE,FINE GRAINED	GREY. BANDS, LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
194.17	0.25	100		75% MUDSTONE 25% CALCITE	SILTSTONE, GREY. LENSES, WHITE. UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
194.40	0.23	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
194.98	0.58	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.43	0.45	100		75% SANDSTONE,FINE GRAINED 20% COAL 5% MUDSTONE	GREY. LAMINAE, BLACK. FRAGMENTS, LENSES, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
195.52	0.09	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
195.70	0.18	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
195.73	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, SLIGHT PERMIABILITY.
196.08	0.35	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	FINE GRAINED SANDSTONE, LENSES, GREY. BANDS, LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
197.04	0.96	100		75% SANDSTONE,FINE GRAINED 15% SILTSTONE 10% COAL	LIGHT GREY. BANDS, LAMINAE, GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
197.25	0.21	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
197.45	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
197.65	0.20	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
198.17	0.52	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
198.26	0.09	100		100% COAL	BANDS, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
198.39	0.13	100		95% MUDSTONE 5% COAL	GREY. STREAKS. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
198.86	0.47	100		90% MUDSTONE 10% COAL	SILTSTONE, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
199.41	0.55	100		100% SILTSTONE	INTERCALATIONS, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
199.54	0.13	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
199.67	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
199.72	0.05	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
199.90	0.16	100		85% SANDSTONE,FINE GRAINED 15% SANDSTONE	LIGHT GREY. VERY FINE GRAINED, CARBONACEOUS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
200.05	0.15	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
200.18	0.13	100		90% SANDSTONE 10% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION, WITH MUD PELLETS, SLIGHT PERMIABILITY.
200.32	0.14	100	T4	90% SANDSTONE 10% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY. VERY FINE GRAINED, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH MUD PELLETS, SLIGHT PERMIABILITY.
200.42	0.10	100		98% SANDSTONE 2% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 55 DEG., SLIGHT PERMIABILITY.
200.84	0.42	100		99% MUDSTONE 1% CARBONACEOUS SHALE	ARGILLACEOUS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
200.91	0.07	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, DARK BROWN. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
201.03	0.12	100		100% COAL, DULL	MUDSTONE, STREAKS, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.09	0.06	100		75% MUDSTONE 25% MUDSTONE	CARBONACEOUS, DARK BROWN. STREAKS, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
201.21	0.12	100	T5	75% MUDSTONE 25% MUDSTONE	CARBONACEOUS, DARK BROWN. STREAKS, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
201.24	0.03	100		80% MUDSTONE 20% MUDSTONE	LIGHT BROWN. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.
201.28	0.04	100		90% MUDSTONE 10% MUDSTONE	PELLETAL, BROWN. LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.31	0.03	0		CORE LOSS	
				TOP OF MT. NICHOLAS LOWER 1 : 376.34 M R.L.	
201.39	0.08	100	41	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
201.45	0.06	100	42	100% COAL, DULL	ARGILLACEOUS, BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.56	0.11	100	42	100% COAL, DULL	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.65	0.09	100	42	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.67	0.02	100	42	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
201.82	0.15	100	42	95% COAL, DULL 5% COAL, BRIGHT	BLACK. LENSES, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
201.88	0.06	100	43	50% CARBONACEOUS MUDSTONE 50% MUDSTONE	BROWN-BLACK. GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
201.91	0.03	100	44	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
201.93	0.02	0	44	CORE LOSS	
202.02	0.09	100	44	100% COAL, DULL	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.03	0.01	0	44	CORE LOSS	
202.06	0.03	100	44	98% COAL, DULL 2% MUDSTONE	SHALY, BLACK. STREAKS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
202.13	0.07	100	44	100% COAL, DULL	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.15	0.02	100	45	70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK BROWN. COALY, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.18	0.03	100	45	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BROWN-BLACK. CARBONACEOUS, DARK BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.19	0.01	100	45	90% CLAYSTONE 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, CREAM. STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG.
202.20	0.01	100	46	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.26	0.06	100	46	100% COAL, HEAVY DULL	SHALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
202.40	0.14	100	46	98% CARBONACEOUS MUDSTONE 1% MUDSTONE 1% PYRITE	COALY, LENSES, BLACK. STREAKS, CREAM. NODULES, YELLOW. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
202.43	0.03	100	46	60% MUDSTONE 40% COAL	INTERCALATIONS, GREY-BROWN. LENSES, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.48	0.05	100	47	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
202.51	0.03	100	47	75% CLAYSTONE 25% CARBONACEOUS MUDSTONE	BANDS, INTERCALATIONS, CREAM. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.54	0.03	100	47	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
202.56	0.02	100	47	90% CARBONACEOUS MUDSTONE 10% COAL	BROWN-BLACK. LENSES, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.66	0.10	100	48	100% COAL, HEAVY DULL	SHALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.67	0.01	100	48	100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.70	0.03	100	48	99% CARBONACEOUS MUDSTONE 1% MUDSTONE	BROWN-BLACK. STREAKS, PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.73	0.03	100	48	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
202.75	0.02	100	48	100% CARBONACEOUS MUDSTONE	COALY, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.44 M; SAMPLED THICKNESS= 1.44 M	
202.79	0.04	100	49	60% CARBONACEOUS MUDSTONE 39% CLAYSTONE 1% COAL	INTERCALATIONS, BROWN-BLACK. PELLETAL, STREAKS, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
202.82	0.03	0		CORE LOSS	
202.91	0.09	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CALCITIC, LIGHT BROWN. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
203.08	0.17	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
203.21	0.13	100	T6	100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
203.30	0.09	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
203.40	0.10	100		100% SANDSTONE	VERY FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION.
203.54	0.14	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION, WITH BURROWING.
203.70	0.16	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, WITH BURROWING.
203.87	0.17	100	T7	75% SANDSTONE,FINE GRAINED 25% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION.
203.90	0.03	100		75% MUDSTONE 24% CARBONACEOUS MUDSTONE 1% COAL	FOSSILIFERROUS, GREY. BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
204.06	0.16	100		99% CARBONACEOUS MUDSTONE 1% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 6 DEG.
204.11	0.05	100		98% COAL, HEAVY DULL 2% MUDSTONE	BLACK. PELLETAL, STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
204.16	0.05	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BROWN-BLACK. PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
204.21	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG.
204.28	0.07	100	81	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF MT. NICHOLAS LOWER 2 : 373.37 M R.L.			
204.30	0.02	100	81	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG.
204.51	0.21	100	82	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
204.67	0.16	0	82	CORE LOSS	
204.71	0.04	100	83	85% COAL, DULL 15% MUDSTONE	BLACK. NODULES, STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
204.77	0.06	100	83	95% CARBONACEOUS MUDSTONE 5% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
204.80	0.03	100	83	100% COAL, DULL WITH FEW BRIGHT BANDS	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
204.83	0.03	100	83	85% COAL, DULL WITH NUMEROUS BRIGHT BANDS 15% MUDSTONE	BLACK. ARGILLACEOUS, PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
204.84	0.01	100	83	80% COAL, DULL 20% MUDSTONE	BLACK. STREAKS, BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG.
204.86	0.02	100	83	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
204.92	0.06	100	83	90% COAL, DULL 10% MUDSTONE	BLACK. LENSES, STREAKS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
204.93	0.01	100	83	90% COAL, BRIGHT 10% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
204.95	0.02	100	83	60% CARBONACEOUS MUDSTONE 39% COAL, DULL 1% MUDSTONE	COALY, BROWN-BLACK. BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
204.97	0.02	100	83	85% COAL, BRIGHT 15% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
204.98	0.01	100	83	100% CARBONACEOUS MUDSTONE	ARGILLACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
205.00	0.02	100	84	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
205.05	0.05	100	85	90% COAL, DULL 10% MUDSTONE	BLACK. BANDS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
205.08	0.03	100	85	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
205.09	0.01	100	85	50% COAL, DULL 49% MUDSTONE 1% PYRITE	BLACK. BANDS, STREAKS, DARK GREY. NODULES, YELLOW. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.24	0.15	100	85	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 65 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.31	0.07	100	85	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
205.51	0.20	100	85	100% COAL, DULL	MUDSTONE, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
205.64	0.13	100	85	96% COAL, HEAVY DULL 4% MUDSTONE	STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.66	0.02	100	85	100% TONSTEIN	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
205.70	0.04	100	85	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
205.71	0.01	100	85	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.76	0.05	100	86	100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
205.77	0.01	100	87	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
205.88	0.11	100	87	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
205.91	0.03	100	87	98% CARBONACEOUS MUDSTONE 2% COAL	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
205.94	0.03	100	87	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
205.97	0.03	100	87	96% COAL, DULL WITH NUMEROUS BRIGHT BANDS 4% MUDSTONE	BLACK. STREAKS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
206.02	0.05	100	87	96% COAL, DULL WITH FEW BRIGHT BANDS 4% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
206.03	0.01	100	87	98% COAL, BRIGHT 2% MUDSTONE	BANDS, BLACK. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
206.04	0.01	100	88	100% MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG.
206.06	0.02	100	88	80% TONSTEIN 20% CARBONACEOUS MUDSTONE	BANDS, GREY-BROWN. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
206.10	0.04	100	88	100% TONSTEIN	COARSE GRAINED, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 53 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.19	0.09	100	89	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
206.21	0.02	100	89	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
206.24	0.03	100	89	95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. STREAKS, PELLETAL, CREAM. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
206.26	0.02	70	89	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
206.27	0.01	100	89	60% COAL, BRIGHT 40% COAL, DULL	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
206.30	0.03	100	89	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
206.35	0.05	100	89	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG.
206.40	0.05	100	89	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
206.46	0.06	100	90	98% COAL, MID LUSTROUS 2% MUDSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.18 M; SAMPLED THICKNESS= 2.18 M	
206.52	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
206.57	0.05	100		55% MUDSTONE 45% CARBONACEOUS MUDSTONE	GREY. BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG.
206.69	0.12	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
206.83	0.14	100	T8	100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.
206.93	0.10	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
206.98	0.05	100		60% MUDSTONE 40% SANDSTONE	GREY. VERY FINE GRAINED, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG.
208.68	1.70	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WITH CROSS LAMINATION.
208.80	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIMONITIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
209.00	0.20	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION.
209.13	0.13	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. BANDS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
209.55	0.42	100		100% SANDSTONE	VERY FINE GRAINED, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
210.31	0.76	100		90% SANDSTONE 10% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
212.87	2.56	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., WITH CARBONACEOUS WISPS.
214.42	1.55	100		98% SANDSTONE,MEDIUM GRAINED 2% COAL	LIMONITIC, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THICKLY BEDDED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	85.04 - 85.25 M	0.21 M
M1	0.78 M	115.48 - 116.26 M	0.78 M
M2	1.19 M	128.58 - 129.77 M	1.19 M
L1	1.44 M	201.31 - 202.75 M	1.44 M
L2	2.18 M	204.28 - 206.46 M	2.18 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	115.30 - 115.48 M	0.18 M
2	115.48 - 115.62 M	0.14 M
3	115.62 - 115.89 M	0.27 M
4	115.89 - 116.26 M	0.37 M
T1	128.18 - 128.33 M	0.15 M
T2	128.33 - 128.47 M	0.14 M
T3	128.47 - 128.56 M	0.09 M
21	128.58 - 128.71 M	0.13 M
22	128.71 - 129.13 M	0.42 M
23	129.13 - 129.18 M	0.05 M
24	129.18 - 129.60 M	0.42 M
25	129.60 - 129.70 M	0.10 M
26	129.70 - 129.77 M	0.07 M
T4	200.18 - 200.32 M	0.14 M
T5	201.09 - 201.21 M	0.12 M
41	201.31 - 201.39 M	0.08 M
42	201.39 - 201.82 M	0.43 M
43	201.82 - 201.88 M	0.06 M
44	201.88 - 202.13 M	0.25 M
45	202.13 - 202.19 M	0.06 M
46	202.19 - 202.43 M	0.24 M
47	202.43 - 202.56 M	0.13 M
48	202.56 - 202.75 M	0.19 M
49	202.75 - 202.79 M	0.04 M
T6	203.08 - 203.21 M	0.13 M
T7	203.70 - 203.87 M	0.17 M
81	204.21 - 204.30 M	0.09 M
82	204.30 - 204.67 M	0.37 M
83	204.67 - 204.98 M	0.31 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
84	204.98 - 205.00 M	0.02 M
85	205.00 - 205.71 M	0.71 M
86	205.71 - 205.76 M	0.05 M
87	205.76 - 206.03 M	0.27 M
88	206.03 - 206.10 M	0.07 M
89	206.10 - 206.40 M	0.30 M
90	206.40 - 206.46 M	0.06 M
T8	206.69 - 206.83 M	0.14 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 120

HOLE TYPE	CHIP	
EASTING	590,805	M AM GRID
NORTHING	5,398,278	M AM GRID
ELEVATION	394.54	M
TOTAL DEPTH DRILLED	54.00	M
DRILLING STARTED	29/03/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	37.00	M
WATER LEVEL AT GEOPHYSICAL LOGGING	42.90	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
5.20	5.20	100		70% DOLERITE 30% CLAY	SCREE, GREY. SCREE, GREY-BROWN. WEATHERED TO SOIL.
7.50	2.30	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
7.70	0.20	100		100% CARBONACEOUS MUDSTONE	DARK BROWN, HIGHLY WEATHERED.
13.00	5.30	100		100% SANDSTONE,COARSE GRAINED	LIGHT BROWN.
		BASE OF WEATHERING			
14.60	1.60	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
17.30	2.70	100		100% SANDSTONE,COARSE GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, WEAK ROCK.
18.00	0.70	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, UNWEATHERED, WEAK ROCK.
19.50	1.50	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, WEAK ROCK.
20.00	0.50	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.00	7.00	100		100% SANDSTONE,COARSE GRAINED	GREY, UNWEATHERED, WEAK ROCK.
28.50	1.50	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, GREY-BROWN. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK.
30.50	2.00	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK.
31.20	0.70	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
37.00	5.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK.
38.00	1.00	0		CHIP LOSS	
41.00	3.00	100		90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, DARK BROWN. LITHIC, GREY. UNWEATHERED, WEAK ROCK.
		TOP OF MT. NICHOLAS LOWER 1 : 353.54 M R.L.			
43.60	2.60	100		100% COAL	BLACK, UNWEATHERED, WEAK ROCK.
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.60 M; SAMPLED THICKNESS= 0.00 M			
45.00	1.40	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK.
47.06	2.06	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
		TOP OF MT. NICHOLAS LOWER 2 : 347.48 M R.L.			

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.55	1.49	100		90% COAL 10% MUDSTONE	BLACK. CARBONACEOUS, BROWN-BLACK. UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.49 M; SAMPLED THICKNESS= 0.00 M	
50.00	1.45	10		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
50.50	0.50	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, WEAK ROCK.
51.50	1.00	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
54.00	2.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	41.00 - 43.60 M	2.60 M
L2	0.00 M	47.06 - 48.55 M	1.49 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 121

HOLE TYPE	CHIP	
EASTING	590,750	M AM GRID
NORTHING	5,398,199	M AM GRID
ELEVATION	349.87	M
TOTAL DEPTH DRILLED	18.30	M
DRILLING STARTED	29/03/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	4.40	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.50	0.50	100		100% SOIL	ARGILLACEOUS, LIGHT BROWN.
2.80	2.30	100		100% DOLERITE	SCREE, GREY-BROWN.
3.60	0.80	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	LAMINAE, BLACK. BROWN.
7.20	3.60	100		100% MUDSTONE	SILTY, GREY-BROWN, VERY WEAK ROCK.
			BASE OF WEATHERING		
7.40	0.20	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
7.60	0.20	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
18.30	10.70	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 122

HOLE TYPE	CHIP	
EASTING	590,718	M AM GRID
NORTHING	5,398,723	M AM GRID
ELEVATION	474.97	M
TOTAL DEPTH DRILLED	30.30	M
DRILLING STARTED	30/03/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL		
WATER LEVEL AT GEOPHYSICAL LOGGING	22.00	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.75	0.75	100		100% DOLERITE	SCREE, GREY, WEATHERED TO SOIL, STRONG ROCK.
11.90	11.15	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
15.50	3.60	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	GREY-BROWN. SILTY, GREY-BROWN. HIGHLY WEATHERED, VERY WEAK ROCK.
16.00	0.50	100		100% MUDSTONE	GREY, HIGHLY WEATHERED, WEAK ROCK.
17.12	1.12	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	GREY-BROWN. SILTY, BROWN. HIGHLY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 457.85 M R.L.	
17.98	0.86	100		100% COAL	BLACK, WEAK ROCK.
				BASE OF WEATHERING	
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.86 M; SAMPLED THICKNESS= 0.00 M	
19.00	1.02	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK.
22.35	3.35	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	SILTY, GREY-BROWN. GREY. UNWEATHERED, WEAK ROCK.
23.33	0.98	100		80% COAL 20% CARBONACEOUS MUDSTONE	BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK.
24.00	0.67	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
30.30	6.30	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	17.12 - 17.98 M	0.86 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 123

HOLE TYPE	CORE
EASTING	591,867 M AM GRID
NORTHING	5,398,615 M AM GRID
ELEVATION	463.04 M
TOTAL DEPTH DRILLED	141.36 M
DRILLING STARTED	30/03/82
DRILLING TIME	5 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
5.00	5.00	100		100% DOLERITE	SCREE, GREY, WEATHERED TO SOIL, WEAKLY CEMENTED.
6.00	1.00	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN, HIGHLY WEATHERED.
7.00	1.00	100		100% MUDSTONE	GREY.
8.00	1.00	100		100% SANDSTONE,FINE GRAINED	GREY-GREEN.
9.00	1.00	100		100% MUDSTONE	GREY.
11.00	2.00	100		100% MUDSTONE	CARBONACEOUS, DARK GREY.
15.00	4.00	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY. BROWN-BLACK.
				*** CORE DESCRIPTION ***	
15.15	0.15	0		CORE LOSS	
16.60	1.45	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	SILTY, GREY. INTERCALATIONS, GREY. UNWEATHERED, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
18.55	1.95	100		70% SANDSTONE 30% MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
18.77	0.22	100		100% MUDSTONE	VARIAGATED COLOUR, HIGHLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
19.65	0.88	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
20.13	0.48	100		100% MUDSTONE	SILTY, VARIAGATED COLOUR, HIGHLY WEATHERED, VERY WEAK ROCK, WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
20.35	0.22	100		60% SANDSTONE,MEDIUM GRAINED 40% SILTSTONE	INTERCALATIONS, LIGHT BROWN. ARGILLACEOUS, VARIAGATED COLOUR. HIGHLY WEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH FLAME/PULL STRUCTS, NON SLAKING, NON STICKY.
21.50	1.15	100		100% SANDSTONE,COARSE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 20 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
21.82	0.32	100		100% SANDSTONE,COARSE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.02	0.20	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
22.42	0.40	0		CORE LOSS	
22.79	0.37	100		100% SANDSTONE,COARSE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 7 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
25.10	2.31	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
25.17	0.07	100		70% SANDSTONE 30% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, LIGHT BROWN. LAMINAE, STREAKS, BROWN-BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
26.33	1.16	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
26.56	0.23	100		100% MUDSTONE	GREY, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
			BASE OF WEATHERING		
26.96	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
28.44	1.48	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
29.48	1.04	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY.
29.63	0.15	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. LENSES, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, SLOW SLAKING, NON STICKY.
30.05	0.42	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, NON SLAKING, NON STICKY.
30.24	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH SLUMP STRUCTURES, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
30.40	0.16	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
32.00	1.60	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY.
33.40	1.40	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
33.55	0.15	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
33.68	0.13	100	T1	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
33.84	0.16	100	T2	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
33.94	0.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 429.10 M R.L.	
34.10	0.16	100	1	100% COAL, DULL	BLACK, UNWEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
34.14	0.04	100	1	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
34.30	0.16	100	2	100% COAL, DULL	BLACK, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
34.32	0.02	100	3	100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
34.40	0.08	100	3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
34.49	0.09	100	4	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.58	0.09	100	5	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.70	0.12	17	5	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.75	0.05	100	5	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.86	0.11	100	5	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
34.89	0.03	100	6	100% TONSTEIN	CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.95	0.06	100	7	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
35.04	0.09	100	8	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
35.57	0.53	100	9	97% COAL, DULL WITH FEW BRIGHT BANDS 3% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
35.58	0.01	100	9	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC, NON SLAKING, NON STICKY.
35.62	0.04	100	9	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.63	0.01	100	10	100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.68	0.01	100	10	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CLAY & TALC, NON SLAKING, NON STICKY.
35.69	0.01	100	10	80% MUDSTONE 20% COAL	FOSSILIFERROUS, LIGHT BROWN. LENSES, BLACK. UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.72	0.03	100	10	100% COAL, DULL	BLACK, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.76 M; SAMPLED THICKNESS= 1.78 M	
35.74	0.02	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.78	0.04	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.95	0.17	100	T3	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.96	0.01	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
36.10	0.14	100		100% SILTSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.18	1.08	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.81	0.63	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
38.37	0.56	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	LITHIC, GREY. SILTY, LENSES, GREY-BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
39.06	0.69	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
39.20	0.14	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	INTERCALATIONS, GREY. ARGILLACEOUS, STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
39.42	0.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
39.74	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.08	0.34	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
42.06	1.98	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.73	1.67	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.88	1.15	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
55.63	10.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY.
55.98	0.35	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LITHIC, LIGHT GREY. LENSES, DARK GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., WITH SLUMP STRUCTURES, WITH MUD PELLETS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
56.05	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
56.22	0.17	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH DISTURBED BEDDING, WITH PLANT REMAINS, SLOW SLAKING, NON STICKY.
56.32	0.10	100		100% MUDSTONE	LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 10 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 406.72 M R.L.	
56.45	0.13	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
56.47	0.02	100		100% CLAYSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
56.50	0.03	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
56.51	0.01	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
56.56	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
56.63	0.07	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
56.73	0.10	100		100% MUDSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, MODERATELY STICKY.
56.93	0.20	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
57.29	0.36	100		100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
57.35	0.06	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.03 M; SAMPLED THICKNESS= 0.00 M	
57.37	0.02	100		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
57.63	0.26	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
57.87	0.24	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
58.14	0.27	100		100% MUDSTONE	SILTY, LAMINAE, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
58.29	0.15	100		100% SILTSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
58.59	0.30	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
69.84	11.25	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
70.11	0.27	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GREY. LENSES, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
70.16	0.05	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
70.19	0.03	100		100% COAL, HEAVY DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
70.24	0.05	0		CORE LOSS	
70.47	0.23	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
70.60	0.13	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
71.00	0.40	100		90% MUDSTONE 10% SILT	SILTY, GREY-BROWN. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 3 DEG., SLOW SLAKING, NON STICKY.
71.60	0.60	100		60% SILT 40% MUDSTONE	GREY. SILTY, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 7 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
72.30	0.70	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 7 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
72.74	0.44	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH DISTURBED BEDDING, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
73.41	0.67	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
77.20	3.79	100		70% SANDSTONE 25% MUDSTONE 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. INTERCALATIONS, GREY. STREAKS, LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
78.76	1.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., WITH PLANT REMAINS, WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
78.78	0.02	100		100% SANDSTONE,FINE GRAINED	DARK GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
84.31	5.53	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
84.63	0.32	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
88.26	3.63	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
88.49	0.23	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
93.20	4.71	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
95.50	2.30	100		100% SANDSTONE,COARSE GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 15 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
95.75	0.25	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	CALCAREOUS, LIGHT GREY. LENSES, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
100.56	4.81	100		100% SANDSTONE,COARSE GRAINED	LITHIC, MASSIVE. GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
101.55	0.99	100		65% SANDSTONE,COARSE GRAINED 35% MUDSTONE	LITHIC, MASSIVE, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH MUD PELLETS, NON SLAKING, NON STICKY.
104.70	3.15	100		100% SANDSTONE,COARSE GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 3 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
104.90	0.20	100		75% SANDSTONE,COARSE GRAINED 25% MUDSTONE	LITHIC, MASSIVE, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH MUD PELLETS, NON SLAKING, NON STICKY.
108.44	3.54	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
109.93	1.49	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
114.11	4.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
114.43	0.32	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
114.48	0.05	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
114.64	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
115.44	0.80	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, WITH BURROWING, NON SLAKING, NON STICKY.
117.72	2.28	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
118.08	0.36	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LENSES, WHITE, UNWEATHERED, MODERATELY STRONG ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
118.17	0.09	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, BEDS DIP 30 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
121.62	3.45	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
121.74	0.12	100	T4	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
121.88	0.14	100	T5	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
121.99	0.11	100	T6	100% CLAYSTONE	LAMINAE, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.01	0.02	100		100% CLAYSTONE	LAMINAE, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.06	0.05	100		100% SILTSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.11	0.05	100		100% SILTSTONE	FOSSILIFERROUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.25	0.14	100	T7	100% SILTSTONE	FOSSILIFERROUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.35	0.10	100		100% SILTSTONE	FOSSILIFERROUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.49	0.14	100	T8	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.57	0.08	100	T9	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.69	0.12	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
122.80	0.11	100	T10	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
122.91	0.11	100	T11	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
123.03	0.12	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
123.25	0.22	100	61	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
123.44	0.19	100	62	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
123.45	0.01	100		100% MUDSTONE	FOSSILIFERROUS, DARK BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
123.65	0.20	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
124.16	0.51	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	INTERCALATIONS, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
124.18	0.02	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.35	0.17	100	T12	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.45	0.10	100	T13	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.47	0.02	100	T13	95% SANDSTONE,FINE GRAINED 5% MUDSTONE	LIGHT GREY. STREAKS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.59	0.12	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	LIGHT GREY. STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
124.61	0.02	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
124.68	0.07	100	T15	100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
124.74	0.06	100	T15	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 1 : 338.30 M R.L.	
124.79	0.05	100	63	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.04	0.25	100	64	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
125.19	0.15	100	64	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.21	0.02	100	64	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	COALY, BROWN-BLACK. PELLETAL, WHITE. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.34	0.13	100	64	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
125.35	0.01	100	65	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
125.68	0.33	100	65	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
125.71	0.03	100	66	60% COAL, DULL 40% MUDSTONE	BLACK. STREAKS, PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.76	0.05	100	66	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.77	0.01	100	66	60% COAL, HEAVY DULL 40% MUDSTONE	BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.78	0.01	100	66	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.85	0.07	100	67	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.88	0.03	100	68	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
125.94	0.06	100	69	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.01	0.07	100	69	80% COAL, DULL 20% MUDSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
126.25	0.24	100	70	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.29	0.04	100	70	90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. WITH CRYSTALLINE PYRITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.34	0.05	100	70	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.40	0.06	100	70	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
126.53	0.13	100	71	90% COAL, HEAVY DULL 10% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.54	0.01	100	71	100% TONSTEIN	CREAM, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.61	0.07	100	72	95% COAL, DULL 5% MUDSTONE	BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
126.64	0.03	100	72	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, BROWN-BLACK. PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
126.65	0.01	100	73	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
126.73	0.08	100	73	100% CLAYSTONE	BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
126.76	0.03	100	74	100% COAL, HEAVY DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.85	0.09	100	74	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
127.04	0.19	100	74	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.30 M; SAMPLED THICKNESS= 2.30 M	
127.05	0.01	100	75	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.08	0.03	100	75	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.12	0.04	100	T16	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.14	0.02	100	T16	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.26	0.12	100	T17	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.36	0.10	100	T18	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.40	0.04	100	T18	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	SILTY, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.51	0.11	100	T14	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	SILTY, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.69	0.18	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	SILTY, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
128.35	0.66	100		100% SILTSTONE	FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
128.75	0.40	100		100% SILTSTONE	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
128.96	0.21	100		100% SILTSTONE	FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
128.97	0.01	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.02	0.05	100		60% COAL, DULL 40% LIMESTONE	INTERCALATIONS, BLACK. LENSES, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.06	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.26	0.20	100		60% SILTSTONE 40% MUDSTONE	INTERCALATIONS, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
129.43	0.17	100	T19	60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.57	0.14	100	T20	95% SANDSTONE,FINE GRAINED 5% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.64	0.07	100		95% SANDSTONE,FINE GRAINED 5% MUDSTONE	INTERCALATIONS, GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.71	0.07	100	T21	100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
129.96	0.25	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.01	0.05	100		100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
130.11	0.10	100	T22	100% MUDSTONE	LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
130.12	0.01	100	T22	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.17	0.05	100	T23	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 2 : 332.87 M R.L.	
130.20	0.03	100	81	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.23	0.03	100	81	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.28	0.05	100	82	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
130.29	0.01	100	83	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.33	0.04	100	83	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.34	0.01	100	84	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.57	0.23	100	84	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
130.59	0.02	100	85	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.60	0.01	100	86	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.61	0.01	0	86	CORE LOSS	
130.64	0.03	100	86	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.68	0.04	100	87	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
130.85	0.17	100	88	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
130.98	0.13	0	88	CORE LOSS	
131.03	0.05	100	89	98% TONSTEIN 2% COAL	WHITE. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.05	0.02	100	90	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.19	0.14	100	90	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
131.30	0.11	100	90	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
131.34	0.04	100	90	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.39	0.05	100	90	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
131.53	0.14	100	90	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
131.59	0.06	100	91	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
131.60	0.01	100	91	60% COAL, DULL 40% SILTSTONE	BLACK. STREAKS, INTERCALATIONS, BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.43 M; SAMPLED THICKNESS= 1.43 M	
131.64	0.04	100		100% SILTSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.75	0.11	100	T24	100% SILTSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.89	0.14	100	T25	100% SILTSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.95	0.06	100		100% SILTSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.06	0.11	100	T26	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.19	0.13	100	T27	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.23	0.04	100		100% MUDSTONE	LAMINAE, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.31	0.08	100		100% MUDSTONE	LAMINAE, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.40	0.09	100		100% MUDSTONE	LAMINAE, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
132.69	0.29	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
133.00	0.31	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	INTERCALATIONS, LIGHT GREY. ARGILLACEOUS, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
133.94	0.94	100		90% SILTSTONE 10% MUDSTONE	FINE GRAINED SANDSTONE, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
133.98	0.04	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
134.32	0.34	100		90% SILTSTONE 10% MUDSTONE	FINE GRAINED SANDSTONE, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
134.45	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
134.63	0.18	100		90% SILTSTONE 10% MUDSTONE	FINE GRAINED SANDSTONE, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
135.10	0.47	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
135.24	0.14	100		90% SILTSTONE 10% MUDSTONE	FINE GRAINED SANDSTONE, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
135.30	0.06	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
135.60	0.30	100		90% SILTSTONE 10% MUDSTONE	FINE GRAINED SANDSTONE, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
135.90	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
136.80	0.90	100		60% SILTSTONE 40% SANDSTONE	FINE GRAINED SANDSTONE, GREY. MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., WITH DISTURBED BEDDING, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
136.91	0.11	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
137.02	0.11	100		100% SILTSTONE	FINE GRAINED SANDSTONE, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
141.36	4.34	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	1.78 M	33.94 - 35.72 M	1.78 M
M2	0.00 M	56.32 - 57.35 M	1.03 M
L1	2.30 M	124.74 - 127.04 M	2.30 M
L2	1.43 M	130.17 - 131.60 M	1.43 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	33.55 - 33.68 M	0.13 M
T2	33.68 - 33.84 M	0.16 M
1	33.94 - 34.14 M	0.20 M
2	34.14 - 34.30 M	0.16 M
3	34.30 - 34.40 M	0.10 M
4	34.40 - 34.49 M	0.09 M
5	34.49 - 34.86 M	0.37 M
6	34.86 - 34.89 M	0.03 M
7	34.89 - 34.95 M	0.06 M
8	34.95 - 35.04 M	0.09 M
9	35.04 - 35.62 M	0.58 M
10	35.62 - 35.72 M	0.10 M
T3	35.78 - 35.95 M	0.17 M
T4	121.62 - 121.74 M	0.12 M
T5	121.74 - 121.88 M	0.14 M
T6	121.88 - 121.99 M	0.11 M
T7	122.11 - 122.25 M	0.14 M
T8	122.35 - 122.49 M	0.14 M
T9	122.49 - 122.57 M	0.08 M
T10	122.69 - 122.80 M	0.11 M
T11	122.80 - 122.91 M	0.11 M
61	123.03 - 123.25 M	0.22 M
62	123.25 - 123.44 M	0.19 M
T12	124.18 - 124.35 M	0.17 M
T13	124.35 - 124.47 M	0.12 M
T15	124.61 - 124.74 M	0.13 M
63	124.74 - 124.79 M	0.05 M
64	124.79 - 125.34 M	0.55 M
65	125.34 - 125.68 M	0.34 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
66	125.68 - 125.78 M	0.10 M
67	125.78 - 125.85 M	0.07 M
68	125.85 - 125.88 M	0.03 M
69	125.88 - 126.01 M	0.13 M
70	126.01 - 126.40 M	0.39 M
71	126.40 - 126.54 M	0.14 M
72	126.54 - 126.64 M	0.10 M
73	126.64 - 126.73 M	0.09 M
74	126.73 - 127.04 M	0.31 M
75	127.04 - 127.08 M	0.04 M
T16	127.08 - 127.14 M	0.06 M
T17	127.14 - 127.26 M	0.12 M
T18	127.26 - 127.40 M	0.14 M
T14	127.40 - 127.51 M	0.11 M
T19	129.26 - 129.43 M	0.17 M
T20	129.43 - 129.57 M	0.14 M
T21	129.64 - 129.71 M	0.07 M
T22	130.01 - 130.12 M	0.11 M
T23	130.12 - 130.17 M	0.05 M
81	130.17 - 130.23 M	0.06 M
82	130.23 - 130.28 M	0.05 M
83	130.28 - 130.33 M	0.05 M
84	130.33 - 130.57 M	0.24 M
85	130.57 - 130.59 M	0.02 M
86	130.59 - 130.64 M	0.05 M
87	130.64 - 130.68 M	0.04 M
88	130.68 - 130.98 M	0.30 M
89	130.98 - 131.03 M	0.05 M
90	131.03 - 131.53 M	0.50 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
91	131.53 - 131.60 M	0.07 M
T24	131.64 - 131.75 M	0.11 M
T25	131.75 - 131.89 M	0.14 M
T26	131.95 - 132.06 M	0.11 M
T27	132.06 - 132.19 M	0.13 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 124

HOLE TYPE	SHAFT
EASTING	590,913 M AM GRID
NORTHING	5,398,804 M AM GRID
ELEVATION	453.60 M
TOTAL DEPTH DRILLED	4.30 M
DRILLING STARTED	2/04/82
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	4.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.46	0.46	100		100% SOIL	BROWN, WEATHERED TO SOIL, WEAKLY CEMENTED, NON SLAKING, MODERATELY STICKY.
2.00	1.54	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
2.03	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
2.23	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
2.35	0.12	100		100% MUDSTONE	DARK BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
2.67	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 450.93 M R.L.	
2.85	0.18	100	01	100% COAL, DULL	SOOTY, BLACK, MODERATELY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
2.97	0.12	100	02	100% CLAY	WHITE, HIGHLY WEATHERED, SOFT, BASAL CONTACT ABRUPT, NON SLAKING, MODERATELY STICKY.
3.09	0.12	100	02	100% CARBONACEOUS MUDSTONE	COALY, BLACK, HIGHLY WEATHERED, STIFF, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
3.10	0.01	100	03	100% COAL, BRIGHT	BANDS, BLACK, MODERATELY WEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CLAY & TALC, NON SLAKING, NON STICKY.
3.21	0.11	100	03	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, MODERATELY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
3.28	0.07	100	04	100% MUDSTONE	FOSSILIFERROUS, DARK BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.30	0.02	100	04	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.31	0.01	100	04	100% CLAYSTONE	LIGHT GREY, MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.33	0.02	100	04	95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BROWN-BLACK. STREAKS, LIGHT GREY. MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.36	0.03	100	05	97% COAL, HEAVY DULL 3% MUDSTONE	BLACK. STREAKS, LIGHT GREY. MODERATELY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.51	0.15	100	05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.55	0.04	100	05	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.56	0.01	100	05	100% COAL, BRIGHT	BLACK, WITH CLAY ON CLEAT, SLIGHTLY WEATHERED, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
3.68	0.12	100	05	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
3.79	0.11	100	06	100% COAL, MID LUSTROUS - DULL	BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
4.02	0.23	100	07	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
				BASE OF WEATHERING	
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.35 M; SAMPLED THICKNESS= 1.35 M	
4.30	0.28	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	1.35 M	2.67 - 4.02 M	1.35 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
01	2.67 - 2.85 M	0.18 M
02	2.85 - 3.09 M	0.24 M
03	3.09 - 3.21 M	0.12 M
04	3.21 - 3.33 M	0.12 M
05	3.33 - 3.68 M	0.35 M
06	3.68 - 3.79 M	0.11 M
07	3.79 - 4.02 M	0.23 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 124R

HOLE TYPE	SHAFT
EASTING	590,913 M AM GRID
NORTHING	5,398,804 M AM GRID
ELEVATION	453.60 M
TOTAL DEPTH DRILLED	4.30 M
DRILLING STARTED	20/04/82
DRILLING TIME	1 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	4.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.46	0.46	100		100% SOIL	BROWN.
2.00	1.54	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN.
2.03	0.03	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK.
2.23	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN.
2.35	0.12	100		100% MUDSTONE	DARK BROWN.
2.67	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN.
2.85	0.18	100		100% COAL, DULL	SOOTY, BLACK.
		TOP OF MT. NICHOLAS MIDDLE 1 : 450.75 M R.L.			
2.97	0.12	100		100% CLAY	WHITE.
3.09	0.12	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK.
3.10	0.01	100	1	100% COAL, BRIGHT	BANDS, BLACK.
3.21	0.11	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
3.28	0.07	100	1	100% MUDSTONE	FOSSILIFERROUS, DARK BROWN.
3.30	0.02	100	1	100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
3.31	0.01	100	1	100% CLAYSTONE	LIGHT GREY.
3.33	0.02	100	1	95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BROWN-BLACK. STREAKS, LIGHT GREY.
3.36	0.03	100	1	97% COAL, HEAVY DULL 3% MUDSTONE	BLACK. STREAKS, LIGHT GREY.
3.51	0.15	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
3.55	0.04	100	1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK.
3.56	0.01	100	1	100% COAL, BRIGHT	BLACK.
3.68	0.12	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
3.79	0.11	100	1	100% COAL, MID LUSTROUS - DULL	BLACK.
4.02	0.23	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
		BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.17 M; SAMPLED THICKNESS= 0.93 M			
4.30	0.28	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.93 M	2.85 - 4.02 M	1.17 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	3.09 - 4.02 M	0.93 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 127

HOLE TYPE	CHIP	
EASTING	591,653	M AM GRID
NORTHING	5,398,664	M AM GRID
ELEVATION	472.97	M
TOTAL DEPTH DRILLED	48.50	M
DRILLING STARTED	14/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	18.70	M
WATER LEVEL AT GEOPHYSICAL LOGGING	11.76	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.00	3.00	100		60% DOLERITE 40% CLAY	SCREE, DARK GREY. BROWN.
4.00	1.00	100		70% DOLERITE 30% CLAY	SCREE, DARK GREY. DARK BROWN.
6.00	2.00	100		100% MUDSTONE	LIGHT BROWN, HIGHLY WEATHERED.
8.00	2.00	100		100% MUDSTONE	SILTY, LIGHT BROWN.
9.70	1.70	100		100% MUDSTONE	GREY-BROWN, HIGHLY WEATHERED.
15.00	5.30	100		100% MUDSTONE	GREY, UNWEATHERED.
17.00	2.00	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED.
18.70	1.70	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED.
20.20	1.50	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED.
21.00	0.80	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY-BROWN. GREY-BROWN. HIGHLY WEATHERED.
25.00	4.00	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT BROWN. LIGHT BROWN. HIGHLY WEATHERED.
36.50	11.50	100		80% SANDSTONE 20% MUDSTONE	MED.-FINE GRAINED, LIGHT BROWN. LIGHT BROWN.
			BASE OF WEATHERING		
				*** CHIP DESCRIPTION ***	
38.54	2.04	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
			TOP OF MT. NICHOLAS MIDDLE 1 : 434.43 M R.L.		
38.88	0.34	100		100% COAL	BLACK, UNWEATHERED.
39.10	0.22	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED.
39.24	0.14	100		100% COAL	BLACK, UNWEATHERED.
39.27	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
39.58	0.31	100		100% COAL	BLACK, UNWEATHERED.
39.64	0.06	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED.
40.22	0.58	100		90% COAL 10% MUDSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED.
				*** CHIP DESCRIPTION ***	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.68 M; SAMPLED THICKNESS= 0.00 M	
41.09	0.87	100		100% MUDSTONE	GREY, UNWEATHERED.
42.24	1.15	100		100% COAL	BLACK, UNWEATHERED.
43.50	1.26	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
48.50	5.00	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	GREY. GREY. UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
H1	0.00 M	38.54 - 40.22 M	1.68 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 128

HOLE TYPE	CHIP
EASTING	591,345 M AM GRID
NORTHING	5,398,754 M AM GRID
ELEVATION	473.53 M
TOTAL DEPTH DRILLED	64.00 M
DRILLING STARTED	14/04/82
DRILLING TIME	1 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	31.70 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
7.80	7.80	100		100% DOLERITE	SCREE, ARGILLACEOUS, DARK GREY, WEATHERED TO SOIL.
9.00	1.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN, HIGHLY WEATHERED.
10.00	1.00	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED.
11.00	1.00	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LITHIC, GREY. BROWN-BLACK. UNWEATHERED.
14.00	3.00	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. SILTY, LIGHT GREY. SLIGHTLY WEATHERED.
24.70	10.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED.
25.50	0.80	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
28.00	2.50	100		70% SANDSTONE,MEDIUM GRAINED 30% MUDSTONE	LIGHT BROWN. LIGHT BROWN. HIGHLY WEATHERED.
29.00	1.00	100		100% SANDSTONE	CARBONACEOUS, GREY-BROWN.
			BASE OF WEATHERING		
30.50	1.50	100		80% SANDSTONE 20% MUDSTONE	FOSSILIFERROUS, GREY. GREY. UNWEATHERED.
			TOP OF MT. NICHOLAS MIDDLE 1 : 443.03 M R.L.		
31.70	1.20	100		100% COAL	BLACK, UNWEATHERED.
			BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.20 M; SAMPLED THICKNESS= 0.00 M		
32.00	0.30	10		100% MUDSTONE	GREY, UNWEATHERED.
34.10	2.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
35.10	1.00	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED.
36.00	0.90	100		80% MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	GREY-BROWN. GREY-BROWN. UNWEATHERED.
42.00	6.00	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
45.00	3.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
46.00	1.00	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
54.00	8.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
54.10	0.10	100		100% CARBONACEOUS MUDSTONE	DARK BROWN, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
56.10	2.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
				TOP OF MT. NICHOLAS MIDDLE 2 : 417.43 M R.L.	
57.00	0.90	100		80% COAL 20% MUDSTONE	BLACK. LIGHT BROWN. UNWEATHERED.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.90 M; SAMPLED THICKNESS= 0.00 M	
58.50	1.50	100		80% MUDSTONE 20% COAL	SILTY, DARK BROWN. BLACK. UNWEATHERED.
62.00	3.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
63.00	1.00	90		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
63.50	0.50	70		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
64.00	0.50	10		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	30.50 - 31.70 M	1.20 M
M2	0.00 M	56.10 - 57.00 M	0.90 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 130

HOLE TYPE	CHIP	
EASTING	591,037	M AM GRID
NORTHING	5,398,769	M AM GRID
ELEVATION	457.24	M
TOTAL DEPTH DRILLED	42.00	M
DRILLING STARTED	15/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	31.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING	12.50	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	ANALYTICAL DATA LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.10	0.10			100% SOIL	DARK BROWN, WEATHERED TO SOIL.
2.00	1.90			100% CLAY	LIGHT BROWN, WEATHERED TO SOIL.
6.50	4.50			100% CLAY	VARIAGATED COLOUR, WEATHERED TO SOIL.
6.60	0.10			100% SANDSTONE	SCREE, BROWN, WEATHERED TO SOIL.
9.00	2.40			100% CLAY	VARIAGATED COLOUR, WEATHERED TO SOIL.
10.00	1.00			70% CLAY 30% DOLERITE	VARIAGATED COLOUR. SCREE, DARK GREY. WEATHERED TO SOIL.
11.00	1.00			60% CLAY 40% CARBONACEOUS MUDSTONE	VARIAGATED COLOUR. SCREE, BROWN-BLACK. WEATHERED TO SOIL.
12.40	1.40			100% CLAY	VARIAGATED COLOUR.
		BASE OF WEATHERING			
14.50	2.10			100% MUDSTONE	GREY-BROWN, UNWEATHERED.
16.00	1.50			100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED.
18.00	2.00			80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	LIGHT GREY. GREY. UNWEATHERED.
21.20	3.20			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
22.10	0.90			100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.70	3.60			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
26.00	0.30			100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
30.90	4.90			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
31.00	0.10			100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, GREY, UNWEATHERED.
33.00	2.00			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
34.80	1.80			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
		TOP OF MT. NICHOLAS MIDDLE 2 : 422.44 M R.L.			
35.00	0.20			100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED.
36.00	1.00			100% COAL, DULL	BLACK, UNWEATHERED.
36.20	0.20			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
		BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.40 M; SAMPLED THICKNESS= 0.00 M			

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.00	4.80			100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
42.00	1.00			100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	0.00 M	34.80 - 36.20 M	1.40 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 132

HOLE TYPE	CORE
EASTING	591,455 M AM GRID
NORTHING	5,399,729 M AM GRID
ELEVATION	620.66 M
TOTAL DEPTH DRILLED	283.88 M
DRILLING STARTED	19/04/82
DRILLING TIME	45 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	MUD
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.21	121.21	80		100% DOLERITE	SCREE, YELLOW-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
121.37	0.16	90		100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK, MODERATELY WEATHERED, VERY WEAK ROCK.
121.43	0.06	100		100% MUDSTONE	LIGHT BROWN, WEAK ROCK.
			BASE OF WEATHERING		
121.82	0.39	95		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, WEAK ROCK.
121.98	0.16	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN. CARBONACEOUS, STREAKS, GREY. UNWEATHERED, WEAK ROCK.
122.29	0.31	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, BLACK. BANDS, STREAKS, GREY. UNWEATHERED, WEAK ROCK.
122.70	0.41	75		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BADLY BROKEN, BLACK. STREAKS, LIGHT GREY. UNWEATHERED, VERY WEAK ROCK.
122.89	0.19	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
122.93	0.04	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
123.03	0.10	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK.
123.11	0.08	100		100% MUDSTONE	CARBONACEOUS, STREAKS, GREY, UNWEATHERED, WEAK ROCK.
123.29	0.18	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, WEAK ROCK.
123.36	0.07	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, VERY WEAK ROCK.
123.38	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
123.41	0.03	100		100% MUDSTONE	WHITE, UNWEATHERED, WEAK ROCK.
123.53	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
123.54	0.01	100		95% TONSTEIN 5% COAL	WHITE. STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
123.71	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
123.75	0.04	100		75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BLACK. PELLETAL, STREAKS, BROWN. UNWEATHERED, WEAK ROCK.
123.76	0.01	100		100% CLAYSTONE	BANDS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
123.87	0.11	100		75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, WEAK ROCK.
123.91	0.04	100		100% MUDSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
123.94	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
124.24	0.30	100		100% MUDSTONE	TUFFACEOUS, CALCAREOUS, CREAM, JNWEATHERED, WEAK ROCK.
124.25	0.01	100		50% CLAYSTONE 50% CARBONACEOUS MUDSTONE	CREAM. BLACK. UNWEATHERED, VERY WEAK ROCK.
124.31	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.36	0.05	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	BANDS, LIGHT BROWN. BROWN-BLACK. UNWEATHERED, WEAK ROCK.
124.46	0.10	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK.
124.49	0.03	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK.
124.52	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
124.60	0.08	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING.
124.74	0.14	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK.
124.77	0.03	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	BANDS, LIGHT BROWN. PELLETAL, BROWN-BLACK. UNWEATHERED, WEAK ROCK.
124.89	0.12	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
125.37	0.48	100		90% MUDSTONE 10% COAL	TUFFACEOUS, CREAM. LENSES, STREAKS, BLACK. UNWEATHERED, VERY WEAK ROCK.
125.55	0.18	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.61	0.06	100		95% MUDSTONE 5% COAL	LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.84	0.23	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.86	0.02	100		55% MUDSTONE 45% CARBONACEOUS MUDSTONE	BANDS, BROWN. LENSES, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
125.95	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
125.99	0.04	100		80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.09	0.10	100		85% MUDSTONE 10% CARBONACEOUS MUDSTONE 5% MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, STREAKS, BLACK. GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.23	0.14	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.26	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.44	0.18	100		95% MUDSTONE 5% COAL	TUFFACEOUS, CREAM. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
126.79	0.35	100		50% MUDSTONE 40% CARBONACEOUS MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. BLACK. LENSES, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.27	0.48	100		95% MUDSTONE 5% MUDSTONE	TUFFACEOUS, CREAM. CARBONACEOUS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.34	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.38	0.04	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
127.52	0.14	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.55	0.03	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.76	0.21	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.82	0.06	100		75% MUDSTONE 25% MUDSTONE	GREY. CARBONACEOUS, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.85	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
127.93	0.08	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.98	0.05	100		75% MUDSTONE 25% COAL	BANDS, LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.13	0.15	100		95% COAL, HEAVY DULL 5% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
128.36	0.23	100		95% COAL, DULL 5% MUDSTONE	BLACK. PELLETAL, LENSES, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
128.38	0.02	0		CORE LOSS	
128.53	0.15	100		100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
128.84	0.31	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
128.87	0.03	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
129.27	0.40	100		70% COAL, HEAVY DULL 30% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
129.34	0.07	100		100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
129.55	0.21	100		60% MUDSTONE 40% COAL, DULL	BANDS, BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
129.66	0.11	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
129.90	0.24	100		95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
129.91	0.01	100		100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.09	0.18	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.10	0.01	100		100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.29	0.19	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.31	0.02	100		100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.40	0.09	100		95% COAL, DULL 5% MUDSTONE	BLACK. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.41	0.01	100		100% MUDSTONE	BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
130.54	0.13	100		100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.56	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.57	0.01	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.59	0.02	100		100% MUDSTONE	WHITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.73	0.14	100		95% COAL, DULL 5% MUDSTONE	BLACK. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.78	0.05	100		85% MUDSTONE 15% COAL, HEAVY DULL	BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
130.83	0.05	100		75% COAL, HEAVY DULL 25% MUDSTONE	BLACK. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.03	0.20	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.06	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.17	0.11	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.22	0.05	100		95% MUDSTONE 5% COAL	LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.28	0.06	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.31	0.03	100		100% MUDSTONE	COALY, STREAKS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.38	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.46	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.53	0.07	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.57	0.04	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
131.70	0.13	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.71	0.01	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.74	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.83	0.09	100		100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING, SLIGHT PERMIABILITY.
131.89	0.06	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
131.98	0.09	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
132.04	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
132.45	0.41	100		75% COAL, DULL 15% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BLACK. BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
132.83	0.38	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
133.00	0.17	100	T1	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
133.13	0.13	100	T2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
133.65	0.52	100		100% MUDSTONE	SILTSTONE, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
133.96	0.31	100		75% SILTSTONE 25% MUDSTONE	CALCAREOUS, BANDS, GREY. STREAKS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.06	0.10	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.10	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
134.33	0.23	100		60% MUDSTONE 40% SILTSTONE	GREY. BANDS, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.45	0.12	100	T3	60% MUDSTONE 40% SILTSTONE	GREY. BANDS, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
134.58	0.13	100	T4	75% MUDSTONE 25% COAL	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
135.77	1.19	100		60% MUDSTONE 40% SILTSTONE	CARBONACEOUS, DARK GREY. LAMINAE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
136.00	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
136.42	0.42	100		60% MUDSTONE 35% CARBONACEOUS MUDSTONE 5% COAL	GREY. BANDS, STREAKS, DARK GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
136.57	0.15	100		95% MUDSTONE 5% COAL	PELLETAL, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
136.61	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
137.20	0.59	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
137.35	0.15	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
138.65	1.30	100		70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, DARK GREY. BANDS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
138.99	0.34	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
139.20	0.21	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
139.22	0.02	100		75% SILTSTONE 25% COAL	CARBONACEOUS, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
139.39	0.17	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.44	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.46	0.02	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.47	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.61	0.14	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.73	0.12	100		95% MUDSTONE 5% MUDSTONE	CARBONACEOUS, DARK GREY. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
139.78	0.05	100		60% COAL, DULL 40% MUDSTONE	BLACK. TUFFACEOUS, BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
139.98	0.20	100		60% COAL, DULL 40% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS, SLIGHT PERMIABILITY.
140.08	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
140.50	0.42	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	LIGHT GREY. BANDS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
140.74	0.24	100		95% MUDSTONE 5% COAL	SILTSTONE, GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
140.76	0.02	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, SLIGHT PERMIABILITY.
140.87	0.11	100		80% CARBONACEOUS MUDSTONE 20% COAL	BLACK. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
141.01	0.14	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.14	1.13	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, MUDSTONE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
142.40	0.26	100		70% SILTSTONE 30% MUDSTONE	INTERCALATIONS, MUDSTONE, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY WIDELY SPACED JOINTS, INFILLED WITH CALCITE, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
143.28	0.88	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
143.93	0.65	100		45% SILTSTONE 30% MUDSTONE 25% SANDSTONE,FINE GRAINED	INTERCALATIONS, MUDSTONE, GREY. BANDS, LENSES, GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, SLIGHT PERMIABILITY.
144.25	0.32	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
144.34	0.09	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
144.45	0.11	100		95% SANDSTONE,FINE GRAINED 5% COAL	SILTSTONE, INTERCALATIONS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
144.99	0.54	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG.
145.33	0.34	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BANDS, CREAM. UNWEATHERED, MODERATELY WEAK ROCK.
145.90	0.57	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
146.65	0.75	100		85% MUDSTONE 15% MUDSTONE	GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
146.69	0.04	100		100% MUDSTONE	CARBONACEOUS, WHITE, UNWEATHERED, MODERATELY STRONG ROCK.
147.17	0.48	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
147.61	0.44	100		70% MUDSTONE 20% CARBONACEOUS MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
147.84	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
148.59	0.75	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	DARK GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
148.60	0.01	100		100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
148.62	0.02	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
148.67	0.05	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
148.85	0.18	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
148.87	0.02	100		100% MUDSTONE	TUFFACEOUS, BADLY BROKEN, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
149.07	0.20	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
150.13	1.06	100		80% MUDSTONE 20% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
151.09	0.96	100		75% MUDSTONE 25% SILTSTONE	GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
151.29	0.20	100		60% SILTSTONE 30% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. LAMINAE, LENSES, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, WITH PLANT REMAINS.
152.09	0.80	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				TOP OF MT. NICHOLAS UPPER 8 : 468.57 M R.L.	
152.16	0.07	100		55% MUDSTONE 45% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
152.33	0.17	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
152.34	0.01	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
152.62	0.28	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
152.67	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
152.75	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
152.76	0.01	100		100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
152.83	0.07	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
152.90	0.07	100		100% MUDSTONE	TUFFACEOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
152.92	0.02	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
153.18	0.26	100	T5	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
153.27	0.09	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 25 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
153.46	0.19	100		50% MUDSTONE 30% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	GREY. LENSES, LIGHT GREY. PELLETAL, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
153.68	0.22	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 1.59 M; SAMPLED THICKNESS= 0.26 M	
154.28	0.60	100		60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. LENSES, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
154.44	0.16	100		100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
154.46	0.02	100		60% MUDSTONE 40% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
154.61	0.15	100	T6	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
155.46	0.85	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CROSS LAMINATION, SLIGHT PERMIABILITY.
156.90	1.44	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
157.24	0.34	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
157.43	0.19	100	T7	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
158.62	1.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
159.22	0.60	100		75% SANDSTONE,MEDIUM GRAINED 20% COAL 5% MUDSTONE	LIGHT GREY. LAMINAE, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
162.87	3.65	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
163.80	0.93	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
163.86	0.06	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	CALCAREOUS, WHITE. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
164.30	0.44	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
164.70	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLIGHT PERMIABILITY.
164.82	0.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
164.99	0.17	100	T8	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
165.12	0.13	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
165.34	0.22	100		60% SANDSTONE 40% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
166.91	1.57	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
167.12	0.21	100		80% SANDSTONE 20% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
167.29	0.17	100		70% SANDSTONE,MEDIUM GRAINED 30% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
168.39	1.10	100		70% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
169.21	0.82	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
169.34	0.13	100	T9	100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
172.10	2.76	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
172.77	0.67	100		70% SANDSTONE 30% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
173.09	0.32	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
173.42	0.33	100		80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
173.76	0.34	100		85% SANDSTONE 15% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS, SLIGHT PERMIABILITY.
174.51	0.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
174.68	0.17	100	T10	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
174.99	0.31	100		70% SANDSTONE 30% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY. MED.-FINE GRAINED, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
175.03	0.04	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
175.04	0.01	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
175.45	0.41	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., SLIGHT PERMIABILITY.
175.70	0.25	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
175.86	0.16	100	T11	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
175.99	0.13	100	T12	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
176.13	0.14	100	T13	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG.
176.20	0.07	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
176.26	0.06	100	2	100% CARBONACEOUS MUDSTONE	COALY, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
176.40	0.14	100	3	95% CLAYSTONE 5% COAL	TUFFACEOUS, CREAM. FRAGMENTS, BLACK. UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, RAPID SLAKING.
				TOP OF MT. NICHOLAS MIDDLE 1 : 444.26 M R.L.	
176.62	0.22	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
176.69	0.07	100	4	75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
176.79	0.10	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
176.80	0.01	100	4	60% COAL, DULL 40% TONSTEIN	BLACK. BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
176.94	0.14	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.00	0.06	100	4	95% COAL, DULL WITH NUMEROUS BRIGHT BANDS 5% MUDSTONE	BLACK. PELLETAL, BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
177.01	0.01	100	4	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
177.04	0.03	100	4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
177.05	0.01	100	4	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.11	0.06	100	4	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.14	0.03	100	5	75% CARBONACEOUS MUDSTONE 25% COAL, BRIGHT	BROWN-BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
177.15	0.01	100	5	60% MUDSTONE 40% TONSTEIN	PELLETAL, GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.19	0.04	100	6	100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, RAPID SLAKING.
177.37	0.18	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
177.53	0.16	100	7	85% COAL, DULL 15% COAL, BRIGHT	BLACK. BANDS, BLACK. WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES.
177.54	0.01	100	8	80% TONSTEIN 20% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES.
177.85	0.31	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH CALCITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, NON-PLANAR DISCONTINUITIES.
177.89	0.04	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
177.99	0.10	100	9	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
178.00	0.01	100	9	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
178.15	0.15	100	9	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
178.24	0.09	100	9	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
178.31	0.07	100	10	70% CARBONACEOUS MUDSTONE 30% COAL, BRIGHT	COALY, BANDS, BROWN-BLACK. BANDS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
178.35	0.04	100	11	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.95 M; SAMPLED THICKNESS= 1.95 M	
178.64	0.29	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
178.79	0.15	100	T14	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
178.95	0.16	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
179.13	0.18	100	T15	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
179.60	0.47	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
180.00	0.40	100		75% SILTSTONE 25% MUDSTONE	GREY. LAMINAE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
181.56	1.56	100		70% MUDSTONE 30% MUDSTONE	GREY. SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG.
182.11	0.55	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
182.53	0.42	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
182.66	0.13	100	T16	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
182.84	0.18	100	T17	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
183.14	0.30	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
184.45	1.31	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
184.80	0.35	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
185.33	0.53	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
187.23	1.90	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
187.41	0.18	100	T18	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
189.50	2.09	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
190.40	0.90	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
190.57	0.17	100	T19	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
191.48	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
191.60	0.12	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
191.85	0.25	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
192.30	0.45	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
192.71	0.41	100		60% SANDSTONE 40% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
194.02	1.31	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
194.90	0.88	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
195.77	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
196.28	0.51	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
197.37	1.09	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
197.55	0.18	100	T20	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
197.72	0.17	100	T21	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG.
197.84	0.12	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS.
197.89	0.05	100		55% SANDSTONE,MEDIUM GRAINED 45% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., WITH MUD PELLETS.
198.10	0.21	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
198.28	0.18	100		75% SANDSTONE,MEDIUM GRAINED 25% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., WITH MUD PELLETS.
				TOP OF MT. NICHOLAS MIDDLE 2 : 422.38 M R.L.	
198.36	0.08	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
198.81	0.45	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
198.84	0.03	100		90% MUDSTONE 10% COAL, BRIGHT	TUFFACEOUS, LIGHT BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
198.87	0.03	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
199.12	0.25	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
199.27	0.15	0		CORE LOSS	
199.37	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
199.47	0.10	0		CORE LOSS	
199.57	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
199.67	0.10	0		CORE LOSS	
199.90	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
200.32	0.42	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
			BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.04 M; SAMPLED THICKNESS= 0.00 M		
200.50	0.18	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
200.76	0.26	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
201.05	0.29	100		100% SANDSTONE,FINE GRAINED	MUDSTONE, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
201.37	0.32	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
201.54	0.17	100	T22	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
201.80	0.26	100		75% SANDSTONE 25% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, MASSIVE, LIGHT GREY. BANDS, MASSIVE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
202.47	0.67	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
202.63	0.16	100	T23	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
203.71	1.08	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
203.90	0.19	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
205.22	1.32	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
205.40	0.18	100	T24	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG.
209.25	3.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS.
209.57	0.32	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, PELLETAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
210.02	0.45	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
211.06	1.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
211.21	0.15	100	T25	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
211.38	0.17	100	T26	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
211.53	0.15	100	T27	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 3 : 409.13 M R.L.	
212.79	1.26	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
212.80	0.01	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
212.83	0.03	0		CORE LOSS	
213.01	0.18	100		100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
213.08	0.07	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
213.19	0.11	100		95% COAL, DULL 5% MUDSTONE	BLACK. PELLETAL. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
213.23	0.04	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 1.70 M; SAMPLED THICKNESS= 0.00 M	
213.29	0.06	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. CARBONACEOUS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
213.32	0.03	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
213.36	0.04	100		100% MUDSTONE	CARBONACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
213.48	0.12	100	T28	100% MUDSTONE	CARBONACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
213.79	0.31	100		100% MUDSTONE	SILTSTONE, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
214.16	0.37	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
214.35	0.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
214.45	0.10	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
215.93	1.48	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
216.36	0.43	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
217.22	0.86	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
217.33	0.11	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
217.47	0.14	100	T29	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
217.62	0.15	100	T30	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
218.44	0.82	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG.
221.41	2.97	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
221.90	0.49	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 55 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
223.29	1.39	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
223.45	0.16	100	T31	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
223.62	0.17	100	T32	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
224.92	1.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
226.58	1.66	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
228.86	2.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
229.01	0.15	100	T33	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
229.15	0.14	100	T34	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
229.31	0.16	100	T35	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
231.45	2.14	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
231.74	0.29	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
231.96	0.22	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
232.07	0.11	100		60% SANDSTONE,MEDIUM GRAINED 35% COAL 5% MUDSTONE	FINE GRAINED SANDSTONE, BANDS, LIGHT GREY. LENSES, FRAGMENTS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
232.33	0.26	100		55% SANDSTONE,MEDIUM GRAINED 45% SANDSTONE,FINE GRAINED	LIGHT GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
233.17	0.84	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
233.31	0.14	100	T36	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
233.44	0.13	100	T37	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
233.76	0.32	100		90% SANDSTONE 10% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
236.50	2.74	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
236.76	0.26	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
237.80	1.04	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
237.94	0.14	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
238.30	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
238.44	0.14	100	T38	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
238.80	0.36	100		90% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE	LIGHT GREY. FRAGMENTS, PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
241.36	2.56	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
241.51	0.15	100	T39	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
242.31	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
243.53	1.22	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
243.89	0.36	100		85% SANDSTONE,MEDIUM GRAINED 10% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
244.60	0.71	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG.
245.05	0.45	100		85% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE,FINE GRAINED 5% MUDSTONE	LIGHT GREY. LAMINAE, LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
245.80	0.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
246.05	0.25	100		85% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 5% COAL	LIGHT GREY. PELLETAL. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
246.62	0.57	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
247.13	0.51	100		95% SANDSTONE,FINE GRAINED 5% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
247.32	0.19	100	T40	100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
247.48	0.16	100	T41	100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
248.08	0.60	100		45% SANDSTONE,COARSE GRAINED 30% MUDSTONE 25% COAL	LIGHT GREY. PELLETAL, FRAGMENTS, LIGHT BROWN. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
248.99	0.91	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
249.41	0.42	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,COARSE GRAINED	LIGHT GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
249.51	0.10	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	FRAGMENTS, GREY. STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
251.09	1.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
251.23	0.14	100	T42	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
251.56	0.33	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
252.22	0.66	100		75% SANDSTONE 20% COAL 5% MUDSTONE	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
252.79	0.57	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED MODERATELY WEAK ROCK.
252.91	0.12	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
253.50	0.59	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
253.80	0.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
256.16	2.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
256.29	0.13	100	T43	100% SANDSTONE,MEDIUM GRAINED	FRAGMENTS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
256.47	0.18	100	T44	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
257.06	0.59	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
257.98	0.92	100		100% MUDSTONE	COALY, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH SLICKENSIDES, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH QUARTZ.
258.03	0.05	100		75% MUDSTONE 25% COAL	CARBONACEOUS, DARK GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
258.08	0.05	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
258.35	0.27	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
258.36	0.01	100		100% MUDSTONE	BANDS, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMI. ILITY.
258.58	0.22	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,FINE GRAINED	LIGHT GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
258.60	0.02	100		100% MUDSTONE	BANDS, SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
258.83	0.23	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
258.95	0.12	100		55% SANDSTONE,FINE GRAINED 45% MUDSTONE	LIGHT GREY. SILTSTONE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
259.03	0.08	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
259.28	0.25	100		85% SANDSTONE 15% COAL	VERY FINE GRAINED, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
259.51	0.23	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
259.65	0.14	100	T45	100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
260.31	0.66	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
260.43	0.12	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
260.51	0.08	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
260.70	0.19	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
262.29	1.59	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
262.44	0.15	100	T46A	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
262.59	0.15	100	T47A	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
263.40	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
264.12	0.72	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 12 DEG., SLIGHT PERMIABILITY.
265.24	1.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
265.39	0.15	100		55% MUDSTONE 40% SILTSTONE 5% COAL	GREY. BANDS, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLIGHT PERMIABILITY.
265.65	0.26	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
265.72	0.07	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
266.99	1.27	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	CARBONACEOUS, GREY. BANDS, LAMINAE, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
267.83	0.84	100		75% SILTSTONE 25% SANDSTONE,FINE GRAINED	INTERCALATIONS, FINE GRAINED SANDSTONE, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., WITH TROUGH CROSS BEDDING, SLIGHT PERMIABILITY.
268.65	0.82	100		70% SANDSTONE,FINE GRAINED 20% SILTSTONE 10% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY. INTERCALATIONS, FINE GRAINED SANDSTONE, DARK GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
268.80	0.15	100	T46	70% SANDSTONE,FINE GRAINED 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. INTERCALATIONS, SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
268.95	0.15	100	T47	50% SANDSTONE,FINE GRAINED 40% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. INTERCALATIONS, SILTSTONE, GREY. PELLETAL, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
269.07	0.12	100	T48	85% SANDSTONE,FINE GRAINED 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, DARK GREY. INTERCALATIONS, SILTSTONE, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., SLIGHT PERMIABILITY.
269.30	0.23	100		85% SANDSTONE 10% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. CARBONACEOUS, BANDS, DARK GREY. PELLETAL, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
269.64	0.34	100		85% MUDSTONE 15% MUDSTONE	GREY. CARBONACEOUS, BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
269.67	0.03	100		60% CARBONACEOUS MUDSTONE 40% TONSTEIN	BROWN-BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
270.02	0.35	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, SLIGHT PERMIABILITY.
270.27	0.25	100		60% MUDSTONE 40% CALCITE	SILTSTONE, GREY. STREAKS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
270.56	0.29	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 35 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLIGHT PERMIABILITY.
270.59	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.
270.61	0.02	100		60% MUDSTONE 40% MUDSTONE	GREY. TUFFACEOUS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., SLIGHT PERMIABILITY.

TOP OF MT. NICHOLAS LOWER 1 : 350.05 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
270.67	0.06	100	41	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
270.88	0.21	100	42	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG.
270.93	0.05	100	42	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
270.95	0.02	100	43	55% COAL, HEAVY DULL 45% TONSTEIN	BROWN-BLACK. BANDS, GREY-BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
270.99	0.04	100	43	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.08	0.09	100	44	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
271.10	0.02	100	44	70% COAL, DULL 30% COAL, BRIGHT	BLACK. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.12	0.02	100	44	60% CARBONACEOUS MUDSTONE 40% COAL, DULL	TONSTEIN, STREAKS, GREY-BROWN. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.13	0.01	100	45	100% TONSTEIN	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.19	0.06	100	46	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
271.21	0.02	100	46	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.23	0.02	100	46	100% MUDSTONE	BANDS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.24	0.01	100	47	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.26	0.02	100	47	80% MUDSTONE 20% CARBONACEOUS MUDSTONE	BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.40	0.14	100	48	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
271.41	0.01	100	48	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.47	0.06	100	48	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
271.48	0.01	100	48	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.59	0.11	100	48	100% COAL, MID LUSTROUS - DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
271.61	0.02	100	48	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.62	0.01	100	49	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.65	0.03	100	49	95% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.69	0.04	100	50	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.71	0.02	100	50	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.73	0.02	100	50	100% CARBONACEOUS MUDSTONE	COALY, BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.86	0.13	100	50	100% COAL, DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
271.87	0.01	100	50	100% MUDSTONE	BANDS, CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
271.93	0.06	100	50	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
271.94	0.01	100	51	100% MUDSTONE	BANDS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
272.02	0.08	100	52	100% COAL, HEAVY DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
272.08	0.06	100	53	55% COAL, DULL 45% MUDSTONE	BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
272.22	0.14	100	54	100% COAL, HEAVY DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG.
272.24	0.02	100	55	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
272.26	0.02	100	55	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
272.29	0.03	100	55	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
272.31	0.02	100	56	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG.
272.32	0.01	100	56	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.71 M; SAMPLED THICKNESS= 1.71 M	
272.33	0.01	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, BROWN. BANDS, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK, THINLY LAMINATED, BEDS DIP 3 DEG.
272.37	0.04	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
272.50	0.13	100	T49	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
272.59	0.09	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	SILTSTONE, LIGHT GREY. CARBONACEOUS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
272.73	0.14	100	T50	100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
272.83	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
272.85	0.02	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
272.89	0.04	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
272.98	0.09	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
273.01	0.03	100		95% SILTSTONE 5% SANDSTONE,FINE GRAINED	GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
273.06	0.05	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
273.08	0.02	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
273.11	0.03	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
273.13	0.02	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
273.21	0.08	100		85% SANDSTONE,FINE GRAINED 15% SILTSTONE	LIGHT GREY. LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
273.28	0.07	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LIGHT GREY. FRAGMENTS, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
273.41	0.13	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
273.55	0.14	100	T51	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
273.67	0.12	100	T52	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
273.84	0.17	100	T53	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
274.02	0.18	100	T54	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG.
274.22	0.20	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 3 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
274.25	0.03	100	71	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG.
274.26	0.01	100	71	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
274.27	0.01	100	72	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG.
274.34	0.07	100	72	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG.
		TOP OF	MT. NICHOLAS LOWER 2 : 346.32 M R.L.		
274.39	0.05	100	73	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
274.44	0.05	100	74	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
274.45	0.01	100	74	100% MUDSTONE	CARBONACEOUS, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
274.76	0.31	100	74	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
274.80	0.04	100	75	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
275.14	0.34	100	76	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
275.27	0.13	100	76	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.30	0.03	100	77	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.31	0.01	100	77	50% MUDSTONE 50% COAL, BRIGHT	BANDS, WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
275.56	0.25	100	78	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.59	0.03	100	79	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
275.72	0.13	100	80	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.82	0.10	100	80	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.86	0.04	100	80	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
275.87	0.01	100	80	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
276.00	0.13	100	80	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
276.01	0.01	100	80	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
276.06	0.05	100	81	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.72 M; SAMPLED THICKNESS= 1.72 M	
276.10	0.04	100		100% SANDSTONE,FINE GRAINED	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
276.14	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
276.18	0.04	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.34	0.16	100	T55	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.43	0.09	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.57	0.14	100	T56	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
276.79	0.22	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
277.18	0.39	100		100% SANDSTONE,FINE GRAINED	SILTSTONE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH TROUGH CROSS BEDDING.
277.31	0.13	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
277.48	0.17	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
277.77	0.29	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 4 DEG.
278.51	0.74	100		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	LIGHT GREY. LAMINAE, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 4 DEG.
278.64	0.13	100		80% SANDSTONE 20% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
280.20	1.56	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
280.35	0.15	100	T57	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
280.50	0.15	100	T58	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
281.44	0.94	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
281.62	0.18	100	T59	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
281.77	0.15	100	T60	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
282.19	0.42	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
282.54	0.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
283.38	0.84	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
283.51	0.13	100	T61	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
283.88	0.37	100		70% SANDSTONE,MEDIUM GRAINED 20% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	LIGHT GREY. BANDS, LIGHT GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.26 M	152.09 - 153.68 M	1.59 M
M1	1.95 M	176.40 - 178.35 M	1.95 M
M2	0.00 M	198.28 - 200.32 M	2.04 M
M3	0.00 M	211.53 - 213.23 M	1.70 M
L1	1.71 M	270.61 - 272.32 M	1.71 M
L2	1.72 M	274.34 - 276.06 M	1.72 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	132.83 - 133.00 M	0.17 M
T2	133.00 - 133.13 M	0.13 M
T3	134.33 - 134.45 M	0.12 M
T4	134.45 - 134.58 M	0.13 M
T5	152.92 - 153.18 M	0.26 M
T6	154.46 - 154.61 M	0.15 M
T7	157.24 - 157.43 M	0.19 M
T8	164.82 - 164.99 M	0.17 M
T9	169.21 - 169.34 M	0.13 M
T10	174.51 - 174.68 M	0.17 M
T11	175.70 - 175.86 M	0.16 M
T12	175.86 - 175.99 M	0.13 M
T13	175.99 - 176.13 M	0.14 M
1	176.13 - 176.20 M	0.07 M
2	176.20 - 176.26 M	0.06 M
3	176.26 - 176.40 M	0.14 M
4	176.40 - 177.11 M	0.71 M
5	177.11 - 177.15 M	0.04 M
6	177.15 - 177.19 M	0.04 M
7	177.19 - 177.53 M	0.34 M
8	177.53 - 177.54 M	0.01 M
9	177.54 - 178.24 M	0.70 M
10	178.24 - 178.31 M	0.07 M
11	178.31 - 178.35 M	0.04 M
T14	178.64 - 178.79 M	0.15 M
T15	178.95 - 179.13 M	0.18 M
T16	182.53 - 182.66 M	0.13 M
T17	182.66 - 182.84 M	0.18 M
T18	187.23 - 187.41 M	0.18 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T19	190.40 - 190.57 M	0.17 M
T20	197.37 - 197.55 M	0.18 M
T21	197.55 - 197.72 M	0.17 M
T22	201.37 - 201.54 M	0.17 M
T23	202.47 - 202.63 M	0.16 M
T24	205.22 - 205.40 M	0.18 M
T25	211.06 - 211.21 M	0.15 M
T26	211.21 - 211.38 M	0.17 M
T27	211.38 - 211.53 M	0.15 M
T28	213.36 - 213.48 M	0.12 M
T29	217.33 - 217.47 M	0.14 M
T30	217.47 - 217.62 M	0.15 M
T31	223.29 - 223.45 M	0.16 M
T32	223.45 - 223.62 M	0.17 M
T33	228.86 - 229.01 M	0.15 M
T34	229.01 - 229.15 M	0.14 M
T35	229.15 - 229.31 M	0.16 M
T36	233.17 - 233.31 M	0.14 M
T37	233.31 - 233.44 M	0.13 M
T38	238.30 - 238.44 M	0.14 M
T39	241.36 - 241.51 M	0.15 M
T40	247.13 - 247.32 M	0.19 M
T41	247.32 - 247.48 M	0.16 M
T42	251.09 - 251.23 M	0.14 M
T43	256.16 - 256.29 M	0.13 M
T44	256.29 - 256.47 M	0.18 M
T45	259.51 - 259.65 M	0.14 M
T46A	262.29 - 262.44 M	0.15 M
T47A	262.44 - 262.59 M	0.15 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T46	268.65 - 268.80 M	0.15 M
T47	268.80 - 268.95 M	0.15 M
T48	268.95 - 269.07 M	0.12 M
41	270.61 - 270.67 M	0.06 M
42	270.67 - 270.93 M	0.26 M
43	270.93 - 270.99 M	0.06 M
44	270.99 - 271.12 M	0.13 M
45	271.12 - 271.13 M	0.01 M
46	271.13 - 271.23 M	0.10 M
47	271.23 - 271.26 M	0.03 M
48	271.26 - 271.61 M	0.35 M
49	271.61 - 271.65 M	0.04 M
50	271.65 - 271.93 M	0.28 M
51	271.93 - 271.94 M	0.01 M
52	271.94 - 272.02 M	0.08 M
53	272.02 - 272.08 M	0.06 M
54	272.08 - 272.22 M	0.14 M
55	272.22 - 272.29 M	0.07 M
56	272.29 - 272.32 M	0.03 M
T49	272.37 - 272.50 M	0.13 M
T50	272.59 - 272.73 M	0.14 M
T51	273.41 - 273.55 M	0.14 M
T52	273.55 - 273.67 M	0.12 M
T53	273.67 - 273.84 M	0.17 M
T54	273.84 - 274.02 M	0.18 M
71	274.22 - 274.26 M	0.04 M
72	274.26 - 274.34 M	0.08 M
73	274.34 - 274.39 M	0.05 M
74	274.39 - 274.76 M	0.37 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
75	274.76 - 274.80 M	0.04 M
76	274.80 - 275.27 M	0.47 M
77	275.27 - 275.31 M	0.04 M
78	275.31 - 275.56 M	0.25 M
79	275.56 - 275.59 M	0.03 M
80	275.59 - 276.01 M	0.42 M
81	276.01 - 276.06 M	0.05 M
T55	276.18 - 276.34 M	0.16 M
T56	276.43 - 276.57 M	0.14 M
T57	280.20 - 280.35 M	0.15 M
T58	280.35 - 280.50 M	0.15 M
T59	281.44 - 281.62 M	0.18 M
T60	281.62 - 281.77 M	0.15 M
T61	283.38 - 283.51 M	0.13 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 135

HOLE TYPE	CHIP
EASTING	590,967 M AM GRID
NORTHING	5,398,801 M AM GRID
ELEVATION	458.14 M
TOTAL DEPTH DRILLED	18.00 M
DRILLING STARTED	22/04/82
DRILLING TIME	1 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	9.80 M
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.00	1.00	100		100% CLAY	ARENACEOUS, SOIL, BROWN, WEATHERED TO SOIL.
4.50	3.50	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, LIGHT BROWN, HIGHLY WEATHERED.
4.60	0.10	100		100% COAL	BLACK, HIGHLY WEATHERED.
6.80	2.20	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY-BROWN. GREY-BROWN.
			BASE OF WEATHERING		
7.40	0.60	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED.
7.45	0.05	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED.
8.77	1.32	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	GREY. FOSSILIFERROUS, GREY-BROWN. UNWEATHERED.
			TOP OF MT. NICHOLAS MIDDLE 1 : 449.37 M R.L.		
9.43	0.66	100		100% COAL	BLACK, UNWEATHERED.
			BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.66 M; SAMPLED THICKNESS= 0.00 M		
9.80	0.37	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. GREY. UNWEATHERED.
11.90	2.10	100		100% MUDSTONE	GREY, UNWEATHERED.
12.00	0.10	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED.
12.05	0.05	100		100% COAL	BLACK, UNWEATHERED.
12.30	0.25	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED.
12.41	0.11	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
13.36	0.95	100		100% COAL	BLACK, UNWEATHERED.
14.30	0.94	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	FOSSILIFERROUS, GREY. CARBONACEOUS, GREY-BROWN. UNWEATHERED.
15.00	0.70	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
16.00	1.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, UNWEATHERED.
16.90	0.90	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY-BROWN. BROWN-BLACK. UNWEATHERED.
18.00	1.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	8.77 - 9.43 M	0.66 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 136

HOLE TYPE	CHIP	
EASTING	590,844	M AM GRID
NORTHING	5,398,735	M AM GRID
ELEVATION	453.07	M
TOTAL DEPTH DRILLED	36.50	M
DRILLING STARTED	22/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	999.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
2.50	2.50	100		70% SOIL 30% DOLERITE	ARGILLACEOUS, BROWN. SCREE, GREY. WEATHERED TO SOIL, WEAKLY CEMENTED.
6.50	4.00	100		100% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LIGHT BROWN, COMPLETELY WEATHERED, STIFF.
6.90	0.40	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, MODERATELY WEATHERED, VERY WEAK ROCK.
7.90	1.00	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
8.10	0.20	100		100% MUDSTONE	BROWN, MODERATELY WEATHERED, VERY WEAK ROCK.
8.50	0.40	100		100% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY-BROWN, VERY WEAK ROCK.
		BASE OF WEATHERING			
9.60	1.10	100		100% MUDSTONE	GREEN, UNWEATHERED, MODERATELY WEAK ROCK.
10.70	1.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
11.50	0.80	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
13.10	1.60	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
13.40	0.30	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE,FINE GRAINED	BROWN-BLACK. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK.
14.50	1.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
14.60	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
15.10	0.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
15.20	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
15.50	0.30	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
15.95	0.45	100		70% CARBONACEOUS MUDSTONE 30% SANDSTONE,FINE GRAINED	BROWN-BLACK. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK.
16.95	1.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
17.00	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
17.60	0.60	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
18.30	0.70	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	GREY. INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK.
20.80	2.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
20.85	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
23.50	2.65	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	CARBONACEOUS, BROWN. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. UNWEATHERED, WEAK ROCK.
24.10	0.60	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
24.50	0.40	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	CALCAREOUS, BROWN. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK.
26.60	2.10	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
26.65	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
27.00	0.35	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 426.07 M R.L.	
27.50	0.50	100		95% COAL 5% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.50 M; SAMPLED THICKNESS= 0.00 M	
28.00	0.50	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
28.20	0.20	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK.
28.40	0.20	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK.
28.60	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK.
30.50	1.90	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	SILTY, GREY-BROWN. GREY. UNWEATHERED, WEAK ROCK.
36.50	6.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	0.00 M	27.00 - 27.50 M	0.50 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 137

HOLE TYPE	CHIP	
EASTING	590,630	M AM GRID
NORTHING	5,398,271	M AM GRID
ELEVATION	357.09	M
TOTAL DEPTH DRILLED	16.00	M
DRILLING STARTED	23/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	7.80	M
WATER LEVEL AT GEOPHYSICAL LOGGING	7.58	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.00	3.00	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, MODERATELY WEATHERED.
				TOP OF MT. NICHOLAS LOWER 1 : 354.09 M R.L.	
4.80	1.80	100		100% COAL	BLACK, SLIGHTLY WEATHERED.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.80 M; SAMPLED THICKNESS= 0.00 M	
5.00	0.20	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK.
				BASE OF WEATHERING	
6.64	1.64	100		100% MUDSTONE	GREY, UNWEATHERED.
7.57	0.93	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
8.52	0.95	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED.
				TOP OF MT. NICHOLAS LOWER 2 : 348.57 M R.L.	
9.86	1.34	100		100% COAL	BLACK, UNWEATHERED.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.34 M; SAMPLED THICKNESS= 0.00 M	
12.80	2.94	100		100% MUDSTONE	GREY, UNWEATHERED.
13.50	0.70	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED.
15.50	2.00	100		100% MUDSTONE	GREY, UNWEATHERED.
16.00	0.50	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	3.00 - 4.80 M	1.80 M
L2	0.00 M	8.52 - 9.86 M	1.34 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 138

HOLE TYPE	CHIP	
EASTING	590,580	M AM GRID
NORTHING	5,398,387	M AM GRID
ELEVATION	372.10	M
TOTAL DEPTH DRILLED	31.00	M
DRILLING STARTED	23/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	999.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING	20.40	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
2.50	2.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, SLIGHTLY WEATHERED.
3.60	1.10	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN, MODERATELY WEATHERED.
8.20	4.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED.
9.00	0.80	100		100% SANDSTONE,MEDIUM GRAINED	YELLOW-BROWN.
		BASE OF WEATHERING			
12.80	3.80	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED.
13.60	0.80	100		100% MUDSTONE	GREY, UNWEATHERED.
14.70	1.10	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	GREY. BROWN-BLACK. UNWEATHERED.
14.96	0.26	100		100% MUDSTONE	GREY, UNWEATHERED.
		TOP OF MT. NICHOLAS LOWER 1 : 357.14 M R.L.			
15.22	0.26	100		100% COAL	BLACK, UNWEATHERED.
15.34	0.12	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
16.08	0.74	100		100% COAL	BLACK, UNWEATHERED.
16.54	0.46	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. BANDS, GREY. UNWEATHERED.
17.30	0.76	100		100% COAL	BLACK, UNWEATHERED.
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.34 M; SAMPLED THICKNESS= 0.00 M			
18.60	1.30	100		100% MUDSTONE	GREY, UNWEATHERED.
20.40	1.80	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	GREY. BANDS, BROWN-BLACK. UNWEATHERED.
20.83	0.43	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. BROWN-BLACK. UNWEATHERED.
		TOP OF MT. NICHOLAS LOWER 2 : 351.27 M R.L.			
21.56	0.73	100		100% COAL	BLACK, UNWEATHERED.
21.66	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
22.16	0.50	100		100% COAL	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
			BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.33 M; SAMPLED THICKNESS= 0.00 M		
22.70	0.54	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED.
24.20	1.50	100		100% MUDSTONE	GREY, UNWEATHERED.
25.00	0.80	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED.
26.30	1.30	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED.
30.00	3.70	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED.
31.00	1.00	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	14.96 - 17.30 M	2.34 M
L2	0.00 M	20.83 - 22.16 M	1.33 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 141

HOLE TYPE	CHIP	
EASTING	590,163	M AM GRID
NORTHING	5,398,592	M AM GRID
ELEVATION	458.82	M
TOTAL DEPTH DRILLED	42.50	M
DRILLING STARTED	27/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	999.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	SAMPLES TAKEN LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
2.20	2.20	100		100% DOLERITE	SCREE, ARGILLACEOUS, BROWN, WEATHERED TO SOIL, COMPACT.
5.86	3.66	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED.
				TOP OF MT. NICHOLAS MIDDLE 1 : 452.96 M R.L.	
6.46	0.60	100		100% COAL	BLACK.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.60 M; SAMPLED THICKNESS= 0.00 M	
8.20	1.74	100		100% MUDSTONE	BROWN.
				BASE OF WEATHERING	
10.00	1.80	100		100% MUDSTONE	GREY, UNWEATHERED.
10.60	0.60	100		60% CARBONACEOUS MUDSTONE 40% COAL	BROWN-BLACK. BLACK. UNWEATHERED.
11.30	0.70	100		100% COAL, DULL	BLACK, UNWEATHERED.
13.00	1.70	100		100% MUDSTONE	GREY, UNWEATHERED.
18.00	5.00	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED.
19.00	1.00	100		100% MUDSTONE	GREY, UNWEATHERED.
28.12	9.12	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
				TOP OF MT. NICHOLAS MIDDLE 2 : 430.70 M R.L.	
29.15	1.03	100		100% COAL	BLACK, UNWEATHERED.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.03 M; SAMPLED THICKNESS= 0.00 M	
32.00	2.85	100		100% MUDSTONE	GREY, UNWEATHERED.
34.00	2.00	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	GREY. BROWN-BLACK. UNWEATHERED.
35.00	1.00	100		50% COAL 50% MUDSTONE	BLACK. GREY-BROWN. UNWEATHERED.
42.50	7.50	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	5.86 - 6.46 M	0.60 M
M2	0.00 M	28.12 - 29.15 M	1.03 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 142

HOLE TYPE	CHIP	
EASTING	591,916	M AM GRID
NORTHING	5,398,284	M AM GRID
ELEVATION	393.32	M
TOTAL DEPTH DRILLED	61.70	M
DRILLING STARTED	28/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	43.00	M
WATER LEVEL AT GEOPHYSICAL LOGGING	45.22	M
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
5.00	5.00	100		100% DOLERITE	SCREE, ARGILLACEOUS, BROWN, WEATHERED TO SOIL, WEAKLY CEMENTED.
12.00	7.00	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED.
15.00	3.00	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
17.70	2.70	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, MODERATELY WEATHERED.
19.50	1.80	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
21.00	1.50	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN.
		BASE OF WEATHERING			
52.70	31.70	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.
54.46	1.76	100		70% MUDSTONE 30% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN. FOSSILIFERROUS, GREY-BROWN. UNWEATHERED.
		TOP OF MT. NICHOLAS LOWER 1 : 338.86 M R.L.			
55.07	0.61	100		100% COAL	COALY, BLACK, UNWEATHERED.
55.36	0.29	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED.
57.92	2.56	100		100% COAL	BLACK, UNWEATHERED.
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 3.46 M; SAMPLED THICKNESS= 0.00 M			
59.10	1.18	100		70% CARBONACEOUS MUDSTONE 30% COAL	BROWN-BLACK. BLACK. UNWEATHERED.
60.48	1.38	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED.
		TOP OF MT. NICHOLAS LOWER 2 : 332.84 M R.L.			
61.92	1.44	100		100% COAL	BLACK, UNWEATHERED.
		BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.44 M; SAMPLED THICKNESS= 0.00 M			
66.50	4.58	100		100% MUDSTONE	GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	54.46 - 57.92 M	3.46 M
L2	0.00 M	60.48 - 61.92 M	1.44 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 143

HOLE TYPE	CHIP	
EASTING	590,395	M AM GRID
NORTHING	5,398,243	M AM GRID
ELEVATION	355.24	M
TOTAL DEPTH DRILLED	24.50	M
DRILLING STARTED	29/04/82	
DRILLING TIME	1	DAYS
CORE SIZE	45.1	MM
HOLE SIZE	75.7	MM
LENGTH CASED		
INITIAL WATER LEVEL	999.90	M
WATER LEVEL AT GEOPHYSICAL LOGGING		
DRILLING FLUID	AIR	
DRILLING CONTRACTOR		
GEOPHYSICAL LOGGING CONTRACTOR		
LITHOLOGICAL DESCRIPTION BY		
INFORMATION AVAILABLE :	LITHOLOGICAL DESCRIPTION	

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.00	4.00	100		70% DOLERITE 30% SANDSTONE	SCREE, GREY. SCREE, LIGHT BROWN. WEATHERED TO SOIL.
6.60	2.60	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED.
7.00	0.40	100		100% MUDSTONE	GREY-BROWN, HIGHLY WEATHERED.
10.95	3.95	100		100% SANDSTONE,MEDIUM GRAINED	GREY-BROWN, HIGHLY WEATHERED.
11.00	0.05	100		100% COAL	BLACK, HIGHLY WEATHERED.
11.40	0.40	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, HIGHLY WEATHERED.
11.95	0.55	100		100% SANDSTONE,FINE GRAINED	GREY-BROWN.
			BASE OF WEATHERING		
12.96	1.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED.
			TOP OF MT. NICHOLAS LOWER 1 : 342.28 M R.L.		
13.36	0.40	100		100% COAL	BLACK, UNWEATHERED.
13.49	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED.
14.60	1.11	100		100% COAL	BLACK, UNWEATHERED.
14.65	0.05	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED.
15.02	0.37	100		100% COAL	BLACK, UNWEATHERED.
			BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.06 M; SAMPLED THICKNESS= 0.00 M		
15.42	0.40	100		100% MUDSTONE	GREY, UNWEATHERED.
17.00	1.58	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY, UNWEATHERED.
18.16	1.16	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN. INTERCALATIONS, GREY. UNWEATHERED.
			TOP OF MT. NICHOLAS LOWER 2 : 337.08 M R.L.		
19.28	1.12	100		100% COAL	BLACK, UNWEATHERED.
19.45	0.13	100		100% MUDSTONE	BROWN, UNWEATHERED.
19.76	0.30	100		100% COAL	BLACK, UNWEATHERED.
20.00	0.24	100		100% MUDSTONE	GREY, UNWEATHERED.
20.26	0.26	100		100% COAL	BLACK, UNWEATHERED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.10 M; SAMPLED THICKNESS= 0.00 M	
20.66	0.40	100		100% MUDSTONE	GREY, UNWEATHERED.
20.96	0.30	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED.
24.50	3.54	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	12.96 - 15.02 M	2.06 M
L2	0.00 M	18.16 - 20.26 M	2.10 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 146

HOLE TYPE	CHIP
EASTING	591,966 M AM GRID
NORTHING	5,398,125 M AM GRID
ELEVATION	351.98 M
TOTAL DEPTH DRILLED	17.40 M
DRILLING STARTED	10/05/82
DRILLING TIME	1 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	14.50 M
WATER LEVEL AT GEOPHYSICAL LOGGING	999.99 M
DRILLING FLUID	AIR
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
17.40	17.40	80		100% DOLERITE	SCREE, BROWN, WEATHERED TO SOIL.

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 151

HOLE TYPE	CORE
EASTING	590,837 M AM GRID
NORTHING	5,399,054 M AM GRID
ELEVATION	524.08 M
TOTAL DEPTH DRILLED	186.40 M
DRILLING STARTED	11/05/82
DRILLING TIME	5 DAYS
CORE SIZE	45.1 MM
HOLE SIZE	75.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CHIP DESCRIPTION ***	
0.20	0.20	100		100% DOLERITE	SCREE, GREY, WEATHERED TO SOIL, WEAKLY CEMENTED.
6.00	5.80	100		100% CLAYSTONE	ARENACEOUS, SOIL, BROWN.
6.50	0.50	100		100% COAL	ARGILLACEOUS, BLACK.
12.48	5.98	100		80% MUDSTONE 20% MUDSTONE	CARBONACEOUS, BROWN-BLACK. SILTY, FOSSILIFERROUS, GREY-BROWN.
				*** CORE DESCRIPTION ***	
12.60	0.12	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, SLIGHTLY WEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 32 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
12.69	0.09	100		60% MUDSTONE 40% MUDSTONE	ARGILLACEOUS, LIGHT BROWN. CARBONACEOUS, INTERCALATIONS, DARK BROWN. SLIGHTLY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
12.74	0.05	100		100% COAL, DULL	BADLY BROKEN, BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
12.78	0.04	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
12.84	0.06	100		100% COAL, DULL	BADLY BROKEN, BLACK, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
12.88	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
13.00	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.04	0.04	100		100% MUDSTONE	CARBONACEOUS, SILTY, DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.17	0.13	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY.
13.25	0.08	100		100% MUDSTONE	BROWN, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 58 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.26	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
13.28	0.02	100		100% SILTSTONE	GREY-BROWN, SLIGHTLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, NON-PLANAR DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.38	0.10	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.49	0.11	100		100% SILTSTONE	ARGILLACEOUS, GREY-BROWN, SLIGHTLY WEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.52	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT DEFORMED, NON SLAKING, NON STICKY.
13.62	0.10	100		100% CLAYSTONE	CREAM, SLIGHTLY WEATHERED, VERY WEAK ROCK, WITH CARBONACEOUS WISPS, SLOW SLAKING, MODERATELY STICKY.
13.72	0.10	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.74	0.02	100		60% SILTSTONE 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, LIGHT BROWN. STREAKS, BROWN-BLACK. SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
13.78	0.04	100		0% SILTSTONE	LIGHT BROWN, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
13.81	0.03	100		80% CARBONACEOUS MUDSTONE 20% SILTSTONE	BROWN-BLACK. LIGHT BROWN. SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
13.87	0.06	100		100% MUDSTONE	BROWN, SLIGHTLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
14.08	0.21	100		100% CARBONACEOUS MUDSTONE	COALY, BADLY BROKEN, BLACK, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
14.11	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, SLIGHTLY WEATHERED, WEAK ROCK, SLOW SLAKING, MODERATELY STICKY.
14.22	0.11	100		100% CLAYSTONE	CREAM, SLIGHTLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
14.35	0.13	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, NON-PLANAR DISCONTINUITIES, NON SLAKING, NON STICKY.
14.40	0.05	100		100% SILTSTONE	FOSSILIFERROUS, BROWN, SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
14.50	0.10	100		100% SILTSTONE	LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT DEFORMED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
14.65	0.15	100		100% MUDSTONE	SILTY, GREY, SLIGHTLY WEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
14.70	0.05	100		100% CLAYSTONE	LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, SLOW SLAKING, NON STICKY.
14.97	0.27	100		70% MUDSTONE 30% MUDSTONE	GREY. SILTY, LIGHT GREY. SLIGHTLY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
15.10	0.13	100		100% CLAYSTONE	FOSSILIFERROUS, LIGHT GREY, SLIGHTLY WEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
15.33	0.23	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
15.58	0.25	100		100% MUDSTONE	SILTY, CREAM, UNWEATHERED, VERY WEAK ROCK, WITH ROOTLET BEDS, NON SLAKING, NON STICKY.
15.66	0.08	100	T1	100% MUDSTONE	SILTY, CREAM, UNWEATHERED, VERY WEAK ROCK, WITH ROOTLET BEDS, NON SLAKING, NON STICKY.
15.80	0.14	100	T2	100% MUDSTONE	SILTY, CREAM, UNWEATHERED, VERY WEAK ROCK, WITH ROOTLET BEDS, NON SLAKING, NON STICKY.
15.95	0.15	100		100% MUDSTONE	SILTY, CREAM, UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, WITH ROOTLET BEDS, NON SLAKING, NON STICKY.
16.08	0.13	100		90% COAL, HEAVY DULL 10% SILTSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
16.09	0.01	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
16.16	0.07	100		90% COAL, HEAVY DULL 10% SILTSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
16.19	0.03	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
16.23	0.04	100		100% MUDSTONE	SILTY, LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
16.26	0.03	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, BROWN. SILTSTONE, BROWN-BLACK. UNWEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
16.38	0.12	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
16.39	0.01	100		100% MUDSTONE	SILTY, LIGHT BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
16.55	0.16	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
17.01	0.46	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
17.09	0.08	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
17.14	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
17.26	0.12	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, SLOW SLAKING, NON STICKY.
17.36	0.10	100		60% SILTSTONE 40% MUDSTONE	ARGILLACEOUS, CARBONACEOUS, BROWN-BLACK. SILTY, BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
17.86	0.50	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, WITH MUD CASTS/CRACKS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
18.02	0.16	100		100% MUDSTONE	SILTY, CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
18.25	0.23	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, BROWN. SILTY, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
18.35	0.10	100		100% MUDSTONE	CARBONACEOUS, SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
18.40	0.05	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	INTERCALATIONS, BROWN. SILTY, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
18.51	0.11	100		100% SILTSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
18.56	0.05	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
18.65	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
18.67	0.02	100		90% SILTSTONE 10% CARBONACEOUS MUDSTONE	STREAKS, LIGHT GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
18.79	0.12	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
18.81	0.02	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
18.90	0.09	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
18.99	0.09	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
19.04	0.05	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, SLOW SLAKING, MODERATELY STICKY.
19.11	0.07	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
19.30	0.19	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
19.39	0.09	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
19.44	0.05	100		100% COAL, HEAVY DULL	BLACK, WITH CALCITE ON BEDDING PLANES, SLIGHTLY WEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
19.52	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
19.73	0.21	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, SLIGHTLY WEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.83	0.10	100		100% MUDSTONE	LIGHT BROWN, SLIGHTLY WEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
20.01	0.18	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
				BASE OF WEATHERING	
20.14	0.13	100		100% CARBONACEOUS MUDSTONE	SILTY, DARK BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
20.49	0.35	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	INTERCALATIONS, BROWN-BLACK. CARBONACEOUS, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
20.56	0.07	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
20.70	0.14	100		100% CLAYSTONE	SILTY, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, BASAL CONTACT ABRUPT, SLOW SLAKING, MODERATELY STICKY.
21.02	0.32	100		95% CARBONACEOUS MUDSTONE 5% SILTSTONE	BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
21.04	0.02	100		100% CLAYSTONE	SILTY, GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
21.40	0.36	100		95% CARBONACEOUS MUDSTONE 5% SILTSTONE	BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
21.69	0.29	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, SLOW SLAKING, NON STICKY.
21.80	0.11	100		100% CLAYSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
22.16	0.36	100		97% COAL, DULL 3% SILTSTONE	BLACK. STREAKS, LIGHT GREY. SLIGHTLY WEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, TIGHT NON PLANAR, NON SLAKING, NON STICKY.
22.33	0.17	100		100% SANDSTONE	VERY FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
22.77	0.44	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.85	0.08	100		100% CLAYSTONE	CREAM, WITH CALCITE ON BEDDING PLANES, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
22.87	0.02	100		100% CLAYSTONE	CREAM, UNWEATHERED, STIFF, NON SLAKING, NON STICKY.
22.89	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
23.14	0.25	100		100% MUDSTONE	ARGILLACEOUS, BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
23.37	0.23	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	COALY, BROWN-BLACK. CARBONACEOUS, LENSES, DARK BROWN. UNWEATHERED, WEAK ROCK, WITH SLUMP STRUCTURES, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
23.75	0.38	100		100% MUDSTONE	FOSSILIFERROUS, SILTY, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
23.78	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
24.18	0.40	100		95% CARBONACEOUS MUDSTONE 5% MUDSTONE	COALY, BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
24.40	0.22	0		CORE LOSS	
24.45	0.05	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.
24.71	0.26	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
24.82	0.11	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	SILTY, INTERCALATIONS, LIGHT BROWN. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
24.90	0.08	100		100% COAL, HEAVY DULL	UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
24.91	0.01	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, TIGHT NON PLANAR, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
25.11	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
25.17	0.06	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
25.18	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, LABILE, BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
25.39	0.21	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
25.43	0.04	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, VERY STICKY.
25.50	0.07	100		100% MUDSTONE	FOSSILIFERROUS, CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
25.58	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
25.84	0.26	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
25.94	0.10	100		100% MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
25.99	0.05	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	INTERCALATIONS, BROWN-BLACK. FOSSILIFERROUS, ARGILLACEOUS, BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, NON SLAKING, NON STICKY.
26.09	0.10	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
26.20	0.11	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH MUD PELLETS, NON SLAKING, NON STICKY.
26.35	0.15	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
26.42	0.07	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	INTERCALATIONS, BROWN-BLACK. FOSSILIFERROUS, ARGILLACEOUS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
26.44	0.02	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, LIGHT BROWN. LENSES, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH SLUMP STRUCTURES, WITH BURROWING, NON SLAKING, NON STICKY.
26.62	0.18	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
26.63	0.01	100		100% MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
26.78	0.15	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
26.79	0.01	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
26.80	0.01	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
26.83	0.03	100		100% CLAYSTONE	FOSSILIFERROUS, CREAM, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
26.88	0.05	100		70% COAL, HEAVY DULL 30% MUDSTONE	BLACK. STREAKS, LAMINAE, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
26.99	0.11	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, MODERATELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
27.03	0.04	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
27.04	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.06	0.02	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
27.17	0.11	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
27.20	0.03	100		100% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.21	0.01	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
27.23	0.02	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.26	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.28	0.02	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.30	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.40	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
27.67	0.27	100		97% CARBONACEOUS MUDSTONE 3% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
27.72	0.05	100		100% MUDSTONE	CREAM, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, MODERATELY STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
27.80	0.08	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	COALY, INTERCALATIONS, BLACK. ARGILLACEOUS, CREAM. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
27.99	0.19	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
28.05	0.06	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
28.07	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
28.10	0.03	100		100% MUDSTONE	FOSSILIFERROUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
28.19	0.09	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
28.22	0.03	100		90% CARBONACEOUS MUDSTONE 10% SILTSTONE	COALY, BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
28.29	0.07	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, MODERATELY STICKY.
28.35	0.06	100		80% COAL, HEAVY DULL 10% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. LENSES, BROWN-BLACK. SILTY, FOSSILIFERROUS, CREAM. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
28.41	0.06	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
28.48	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
28.51	0.03	100		100% MUDSTONE	ARGILLACEOUS, CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
28.52	0.01	100		100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
28.88	0.36	100		80% CARBONACEOUS MUDSTONE 20% COAL, DULL WITH NUMEROUS BRIGHT BANDS	COALY, BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
28.93	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
29.29	0.36	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.39	0.10	100		60% SILTSTONE 20% CARBONACEOUS MUDSTONE 20% CLAYSTONE	LAMINAE, GREY-BROWN. LAMINAE. LAMINAE, GREY-BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
29.57	0.18	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, WITH BURROWING, WITH SLUMP STRUCTURES, SLOW SLAKING, NON STICKY.
29.92	0.35	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
29.96	0.04	100		100% MUDSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
29.97	0.01	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
30.41	0.44	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. GREY. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH BURROWING, WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
34.12	3.71	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH BURROWING, WIDELY SPACED JOINTS, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
34.33	0.21	100		60% SILTSTONE 40% MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, GREY. CARBONACEOUS, DARK BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
34.35	0.02	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
34.57	0.22	100		50% MUDSTONE 50% SILTSTONE	SILTY, GRADING TO, GREY. GREY. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, NON SLAKING, NON STICKY.
34.67	0.10	100		100% MUDSTONE	SILTY, LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
34.76	0.09	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, CREAM, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
34.83	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
34.84	0.01	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
34.90	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
34.95	0.05	100		100% SILTSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
35.00	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
35.53	0.53	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
35.98	0.45	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
36.11	0.13	100		60% SILTSTONE 40% CARBONACEOUS MUDSTONE	ARGILLACEOUS, GREY. COALY, LENSES, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
36.23	0.12	100		95% CARBONACEOUS MUDSTONE 5% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BROWN-BLACK. LENSES, BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
36.47	0.24	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
36.53	0.06	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
36.56	0.03	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, VERY WEAK ROCK, NON SLAKING, MODERATELY STICKY.
36.64	0.08	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
36.89	0.25	100		70% CARBONACEOUS MUDSTONE 30% MUDSTONE	BROWN-BLACK. FOSSILIFERROUS, BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
36.94	0.05	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
36.98	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS UPPER 8 : 487.10 M R.L.	
37.18	0.20	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
37.22	0.04	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
37.23	0.01	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
37.25	0.02	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, MODERATELY STICKY.
37.35	0.10	100		100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.46	0.11	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, WITH MUD PELLETS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.52	0.06	100		90% MUDSTONE 10% COAL	PELLETAL, LIGHT BROWN. BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
37.56	0.04	100		80% COAL, MID LUSTROUS - DULL 20% MUDSTONE	INTERCALATIONS, BLACK. STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.58	0.02	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
37.74	0.16	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.78	0.04	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
37.82	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.84 M; SAMPLED THICKNESS= 0.00 M	
37.86	0.04	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
38.43	0.57	100		85% MUDSTONE 15% SILTSTONE	INTERCALATIONS, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
38.58	0.15	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
38.59	0.01	100		100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.61	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
38.77	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
39.50	0.73	100		60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, GRADING TO, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
41.26	1.76	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH BURROWING, NON SLAKING, NON STICKY.
41.57	0.31	100		60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, GRADING TO, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.68	0.11	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
42.19	0.51	100		60% MUDSTONE 40% SILTSTONE	SILTY, INTERCALATIONS, GREY. ARGILLACEOUS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH BURROWING, NON SLAKING, NON STICKY.
42.67	0.48	100		100% MUDSTONE	SILTY, LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.79	0.12	100		100% CARBONACEOUS MUDSTONE	LAMINAE, BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
42.84	0.05	100		100% MUDSTONE	CALCAREOUS, WHITE, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
42.88	0.04	100		60% SILTSTONE 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.21	0.33	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.68	0.47	100		80% MUDSTONE 20% SILTSTONE	SILTY, INTERCALATIONS, GREY. ARGILLACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., WITH BURROWING, NON SLAKING, NON STICKY.
44.92	1.24	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
44.97	0.05	100		100% MUDSTONE	SILTY, GREY, WITH CALCITE ON BEDDING PLANES, UNWEATHERED, WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 20 DEG., TIGHT NON PLANAR, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.01	0.04	100		100% MUDSTONE	CALCAREOUS, CREAM, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
45.40	0.39	100		95% MUDSTONE 5% SILTSTONE	INTERCALATIONS, SILTY, GREY. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
45.87	0.47	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
46.68	0.81	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	BROWN-BLACK. LITHIC, PELLETAL, DARK GREEN. UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
47.38	0.70	100		90% SANDSTONE 10% CARBONACEOUS MUDSTONE	LITHIC, PELLETAL, LIGHT BROWN. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
47.64	0.26	100		80% CARBONACEOUS MUDSTONE 20% SILTSTONE	LITHIC, BROWN-BLACK. LITHIC, LIGHT BROWN. UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
47.73	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
47.80	0.07	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
47.89	0.09	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
47.96	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
49.00	1.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
50.03	1.03	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
51.18	1.15	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
51.25	0.07	100		100% MUDSTONE	ARGILLACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
51.89	0.64	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.55	0.66	100		100% MUDSTONE	ARGILLACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
53.55	1.00	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
53.72	0.17	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, WITH BURROWING, SLOW SLAKING, NON STICKY.
53.92	0.20	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, PELLETAL, DARK GREY. ARGILLACEOUS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH BURROWING, NON SLAKING, NON STICKY.
54.05	0.13	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	LIGHT BROWN. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
54.09	0.04	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	PELLETAL, LITHIC, LIGHT BROWN. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
56.48	2.39	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH BURROWING, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 40 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
56.50	0.02	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 32 DEG., NON SLAKING, NON STICKY.
56.66	0.16	100		100% MUDSTONE	LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
56.72	0.06	100		60% MUDSTONE 40% MUDSTONE	CARBONACEOUS, LAMINAE, BROWN. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 30 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
56.83	0.11	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
56.83	0.00	100		100% SHEAR/FAULT ZONE	WITH SLICKENSIDES, JOINTS DIP 50 DEG.
56.94	0.11	100		100% MUDSTONE	LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
57.80	0.86	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
58.25	0.45	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
61.70	3.45	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
63.03	1.33	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
64.21	1.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
64.56	0.35	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, SLIGHTLY WEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
64.66	0.10	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT EROSIONAL, NON SLAKING, NON STICKY.
64.70	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
64.71	0.01	100		100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
64.76	0.05	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
64.87	0.11	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
65.99	1.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
			BASE OF WEATHERING		
66.79	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
66.93	0.14	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
67.14	0.21	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
67.24	0.10	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
67.56	0.32	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
68.20	0.64	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
70.51	2.31	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
71.24	0.73	100		80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	MASSIVE, LITHIC, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
71.42	0.18	100	T3	80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	MASSIVE, LITHIC, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
71.59	0.17	100	T4	80% SANDSTONE,MEDIUM GRAINED 20% MUDSTONE	MASSIVE, LITHIC, GREY. PELLETAL, LENSES, GREY. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
71.66	0.07	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	LITHIC, GREY. COALY, LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
71.79	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 10 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 452.29 M R.L.	
71.88	0.09	100	1	90% COAL, DULL 10% CARBONACEOUS MUDSTONE	BLACK. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
71.95	0.07	100	1	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BEDS DIP 33 DEG., NON SLAKING, NON STICKY.
72.09	0.14	100	2	100% COAL, HEAVY DULL	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
72.23	0.14	100	2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
72.36	0.13	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
72.62	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.64	0.02	100		100% SILTSTONE	LAMINAE, CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
72.70	0.06	0	3	CORE LOSS	
72.81	0.11	100	3	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
72.89	0.08	100	4	100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
73.11	0.22	100	5	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
73.13	0.02	100	6	60% CLAYSTONE 40% COAL, DULL	BROWN. LENSES, BLACK. UNWEATHERED, FIRM, THICKLY LAMINATED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
73.16	0.03	100	7	90% COAL, DULL 10% MUDSTONE	INTERCALATIONS, BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
73.37	0.21	100	7	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
73.39	0.02	100	7	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
73.42	0.03	100	7	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
73.43	0.01	100	8	60% COAL, DULL 40% MUDSTONE	BLACK. LIGHT BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, NON SLAKING, NON STICKY.
73.79	0.36	100	8	100% COAL, DULL	UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 2.00 M; SAMPLED THICKNESS= 1.59 M	
74.11	0.32	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, SLOW SLAKING, NON STICKY.
74.45	0.34	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.59	0.14	100		100% SILTSTONE	ARGILLACEOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.29	0.70	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., SLOW SLAKING, NON STICKY.
75.31	0.02	100	9	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.41	0.10	100	9	100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, SLOW SLAKING, MODERATELY STICKY.
75.47	0.06	100	10	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.54	0.07	100	11	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
75.55	0.01	50	12	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.59	0.04	80	12	100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.64	0.05	100	13	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.72	0.08	100	13	60% COAL, DULL 40% MUDSTONE	BLACK. STREAKS, CARBONACEOUS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.75	0.03	100	14	100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.81	0.06	100	14	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
75.84	0.03	100	14	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH BURROWING, NON SLAKING, NON STICKY.
75.86	0.02	100	14	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
75.90	0.04	100	15	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
75.91	0.01	100	15	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
76.01	0.10	100	16	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
76.42	0.41	100	16	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
76.56	0.14	100	17	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
76.85	0.29	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH SLUMP STRUCTURES, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
77.19	0.34	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH FLAME/PULL STRUCTS, NON SLAKING, NON STICKY.
80.90	3.71	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
81.25	0.35	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
82.30	1.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
82.43	0.13	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
86.65	4.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
86.70	0.05	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
88.10	1.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 10 DEG., WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
89.00	0.90	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, NON SLAKING, NON STICKY.
94.50	5.50	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
94.75	0.25	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 12 DEG., WITH TROUGH CROSS BEDDING, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
95.60	0.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 10 DEG., NON SLAKING, NON STICKY.
96.71	1.11	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 4 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
96.86	0.15	100		100% CLAYSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
97.03	0.17	100		60% MUDSTONE 30% CLAYSTONE 10% SILTSTONE	ARGILLACEOUS, GREY. INTERCALATIONS, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT EROSIONAL, BEDS DIP 1 DEG., WITH RIPPLES, NON SLAKING, NON STICKY.
97.36	0.33	100		60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
97.60	0.24	100		100% MUDSTONE	ARGILLACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
97.67	0.07	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	ARGILLACEOUS, LAMINAE, GREY. INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
97.74	0.07	100		70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, BROWN-BLACK. ARGILLACEOUS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., WITH BURROWING, NON SLAKING, NON STICKY.
97.92	0.18	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, BROWN-BLACK. ARGILLACEOUS, GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 426.16 M R.L.	
98.00	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
98.04	0.04	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
98.06	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
98.07	0.01	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
98.30	0.23	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, SLOW SLAKING, NON STICKY.
98.48	0.18	100		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
98.51	0.03	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
98.73	0.22	100		99% COAL, DULL 1% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
98.97	0.24	100		98% COAL, DULL 2% MUDSTONE	LIGNITIC, BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.05 M; SAMPLED THICKNESS= 0.00 M	
99.05	0.08	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
99.23	0.18	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
101.42	2.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
101.52	0.10	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
102.35	0.83	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
104.93	2.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
105.26	0.33	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
111.26	6.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT EROSIONAL, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
111.29	0.03	100		100% MUDSTONE	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 3 : 412.79 M R.L.	
111.40	0.11	100		100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
111.68	0.28	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
111.75	0.07	100		90% CARBONACEOUS MUDSTONE 10% COAL	COALY, BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
111.82	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
112.23	0.41	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, SLOW SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.94 M; SAMPLED THICKNESS= 0.00 M	
112.34	0.11	100		100% MUDSTONE	FOSSILIFERROUS, LAMINAE, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
112.55	0.21	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
113.37	0.82	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LIGHT GREY. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 48 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
113.50	0.13	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
114.57	1.07	100		60% SANDSTONE,MEDIUM GRAINED 40% SANDSTONE	INTERCALATIONS, LITHIC, GREY. MED.-FINE GRAINED, LITHIC, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
118.74	4.17	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
119.24	0.50	100		100% SILTSTONE	FOSSILIFERROUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
121.20	1.96	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
128.67	7.47	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
128.77	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LENSES, DARK BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 15 DEG., NON SLAKING, NON STICKY.
130.00	1.23	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
131.05	1.05	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
135.63	4.58	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
135.69	0.06	100		100% GRANULE CONGLOMERATE	LITHIC, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
140.13	4.44	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
141.00	0.87	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
146.20	5.20	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
146.34	0.14	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LITHIC, GREY. FRAGMENTS, LENSES, BLACK. WITH CALCITE ON BEDDING PLANES, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
146.50	0.16	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LENSES, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
146.70	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH MUD PELLETS, NON SLAKING, NON STICKY.
147.20	0.50	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
149.27	2.07	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
150.47	1.20	100		97% SANDSTONE 3% COAL	MED.-COARSE GRAINED, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
150.80	0.33	100		90% SANDSTONE 10% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 12 DEG., WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
151.20	0.40	100		90% SANDSTONE 10% COAL	CALCAREOUS, LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
151.55	0.35	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 10 DEG., WITH CROSS LAMINATION, WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
151.80	0.25	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
158.49	6.69	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH NORMAL GRADED BEDDING, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
159.58	1.09	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH BURROWING, WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 62 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
159.60	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
159.73	0.13	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
159.91	0.18	100		100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
161.56	1.65	100		90% SANDSTONE 10% SILTSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
163.00	1.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
163.90	0.90	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
165.55	1.65	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
165.70	0.15	100	T5	100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
165.85	0.15	100	T6	100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.00	0.15	100	T7	100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.16	0.16	100	T8	100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.17	0.01	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, NON SLAKING, NON STICKY.
166.28	0.11	100		80% MUDSTONE 20% SILTSTONE	SILTY, FOSSILIFERROUS, BROWN. STREAKS, INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
166.40	0.12	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.56	0.16	100	T9	100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.70	0.14	100	T10	100% MUDSTONE	SILTY, FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
166.75	0.05	100		80% MUDSTONE 20% SILTSTONE	SILTY, FOSSILIFERROUS, BROWN. STREAKS, LAMINAE, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
166.88	0.13	100		90% MUDSTONE 10% SILTSTONE	SILTY, FOSSILIFERROUS, BROWN. LENSES, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
167.04	0.16	100	T11	90% MUDSTONE 10% SILTSTONE	SILTY, FOSSILIFERROUS, BROWN. LENSES, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
167.10	0.06	100		100% CLAYSTONE	LENSES, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, NON SLAKING, NON STICKY.
167.26	0.16	100	T12	100% CLAYSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
167.35	0.09	100	T13	100% CLAYSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
167.45	0.10	100	T14	100% CLAYSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
167.46	0.01	100	T14	100% CLAYSTONE	LAMINAE, CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
167.57	0.11	100		100% SILTSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
168.07	0.50	100		100% SANDSTONE	VERY FINE GRAINED, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
169.54	1.47	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
169.72	0.18	100	T15	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
169.82	0.10	100	T16	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
169.94	0.12	100	T17	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
170.08	0.14	100	T18	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
170.21	0.13	100	T19	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
170.63	0.42	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
170.75	0.12	100	61	95% COAL, MID LUSTROUS - DULL 5% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
170.78	0.03	100	62	100% TONSTEIN	LIGHT BROWN, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

TOP OF MT. NICHOLAS LOWER 1 : 353.30 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
170.87	0.09	100	63	90% COAL, DULL 10% MUDSTONE	BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
170.88	0.01	100	64	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
170.92	0.04	100	65	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
170.95	0.03	100	65	90% MUDSTONE 10% COAL	PELLETAL, LIGHT BROWN. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
171.13	0.18	100	66	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
171.41	0.28	100	66	100% COAL, DULL	FOSSILIFERROUS, BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
171.42	0.01	100	67	50% COAL, BRIGHT 50% COAL, DULL	BANDS, BLACK. FOSSILIFERROUS, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
171.47	0.05	100	67	100% COAL, DULL	FOSSILIFERROUS, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
171.67	0.20	100	67	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
171.75	0.08	100	68	98% MUDSTONE 2% COAL, BRIGHT WITH FEW DULL BANDS	CARBONACEOUS, DARK GREY. BANDS, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
171.85	0.10	100	69	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
171.89	0.04	100	70	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
171.97	0.08	100	70	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
171.99	0.02	100	71	100% CARBONACEOUS MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.01	0.02	100	71	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.03	0.02	100	71	100% CARBONACEOUS MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.04	0.01	100	71	70% MUDSTONE 30% COAL, DULL	BANDS, CREAM. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.08	0.04	100	71	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.11	0.03	100	71	80% COAL, HEAVY DULL 20% MUDSTONE	BLACK. CARBONACEOUS, STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.17	0.06	100	71	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	LIGHT BROWN. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.23	0.06	100	71	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.26	0.03	100	71	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.27	0.01	100	71	90% MUDSTONE 10% COAL	PELLETAL, LIGHT GREY. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.33	0.06	100	71	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.37	0.04	100	72	80% TONSTEIN 20% COAL, DULL	WHITE. INTERCALATIONS, BLACK. WITH PYRITE ON BEDDING PLANES, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
172.43	0.06	100	73	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.45	0.02	100	73	100% MUDSTONE	ARGILLACEOUS, CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WITH BURROWING, NON SLAKING, NON STICKY.
172.47	0.02	100	73	100% CARBONACEOUS SHALE	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.51	0.04	100	73	100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.55	0.04	100	73	60% CARBONACEOUS MUDSTONE 40% COAL, DULL	SILTY, INTERCALATIONS, BROWN-BLACK. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.63	0.08	100	74	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.71	0.08	100	75	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.72	0.01	100	75	60% COAL, MID LUSTROUS - DULL 40% MUDSTONE	BLACK. BANDS, STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
172.82	0.10	100	75	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.84	0.02	100	75	50% CARBONACEOUS MUDSTONE 30% COAL, DULL 20% MUDSTONE	LIGHT BROWN. INTERCALATIONS, BLACK. STREAKS, CREAM. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
172.97	0.13	100	76	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.19 M; SAMPLED THICKNESS= 2.19 M	
172.99	0.02	100	77	100% MUDSTONE	PELLETAL, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
173.00	0.01	100	77	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
173.02	0.02	100	77	70% MUDSTONE 30% CARBONACEOUS MUDSTONE	LENSES, PELLETAL, LIGHT GREY. COALY, INTERCALATIONS, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.09	0.07	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.28	0.19	100	T20	100% MUDSTONE	SILTY, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.45	0.17	100	T21	100% MUDSTONE	SILTY, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.56	0.11	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.67	0.11	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
173.75	0.08	100	T22	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.00	0.25	100	T23	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.16	0.16	100	T24	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.24	0.08	100	T25	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.33	0.09	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.44	0.11	100		100% MUDSTONE	CARBONACEOUS, ARGILLACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.45	0.01	100		100% SILTSTONE	CALCAREOUS, CREAM, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.47	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.50	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
174.56	0.08	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.64	0.08	100	T26	100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT DEFORMED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
174.65	0.01	100	81	50% MUDSTONE 50% CARBONACEOUS MUDSTONE	STREAKS, CREAM. COALY, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 2 : 349.43 M R.L.	
174.78	0.13	100	82	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
174.96	0.18	100	83	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.00	0.04	100	83	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.10	0.10	100	83	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.11	0.01	100	83	80% COAL, DULL 20% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
175.27	0.16	100	83	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
175.29	0.02	100	83	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.34	0.05	100	83	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.38	0.04	100	84	70% COAL, DULL 30% MUDSTONE	BLACK. PELLETAL, GREY-BROWN. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
175.44	0.06	100	85	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.52	0.08	100	85	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.63	0.11	100	85	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.70	0.07	100	85	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.71	0.01	100	85	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
175.72	0.01	100	86	100% TONSTEIN	TUFFACEOUS, WHITE, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 7 DEG., NON SLAKING, NON STICKY.
175.75	0.03	100	87	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
175.77	0.02	100	87	90% COAL, MID LUSTROUS - DULL 10% TONSTEIN	BLACK. DISSEMINATED, WHITE. UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, NON SLAKING, NON STICKY.
175.82	0.05	100	88	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
175.88	0.06	100	89	99% COAL, DULL 1% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.01	0.13	100	89	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.02	0.01	100	89	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.06	0.04	100	90	100% MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.11	0.05	100	91	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
176.25	0.14	100	92	98% COAL, DULL WITH NUMEROUS BRIGHT BANDS 2% MUDSTONE	BLACK. STREAKS, LENSES, GREY-BROWN. UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.29	0.04	100	92	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSE JOINT SPACING, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
176.34	0.05	100	92	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
176.37	0.03	100	92	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
176.38	0.01	100	92	60% COAL, DULL 40% CARBONACEOUS MUDSTONE	BLACK. COALY, LIGHT BROWN. UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
176.42	0.04	100	92	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
176.46	0.04	100	93	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
176.49	0.03	100	93	70% MUDSTONE 30% CARBONACEOUS MUDSTONE	CALCAREOUS, STREAKS, LIGHT BROWN. COALY, INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.56	0.07	100	93	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.91 M; SAMPLED THICKNESS= 1.91 M	
176.60	0.04	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.68	0.08	100	T27	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.79	0.11	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.84	0.05	100	T28	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.90	0.06	100	T29	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
176.98	0.08	100	T30	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
177.09	0.11	100	T31	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.13	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.27	0.14	100		60% MUDSTONE 40% SILTSTONE	GREY. INTERCALATIONS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.47	0.20	100		80% SANDSTONE 20% MUDSTONE	VERY FINE GRAINED, LIGHT GREY. SILTY, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.64	0.17	100		60% MUDSTONE 40% SANDSTONE	SILTY, GREY. VERY FINE GRAINED, ILLITIC, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.72	0.08	100		80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
177.93	0.21	100	T32	80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
178.06	0.13	100	T33	80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
178.20	0.14	100	T34	60% SANDSTONE,FINE GRAINED 40% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
178.27	0.07	100	T35	80% SANDSTONE,FINE GRAINED 20% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
178.38	0.11	100	T36	100% SANDSTONE,FINE GRAINED	MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.
178.48	0.10	100	T37	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
178.64	0.16	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
179.00	0.36	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. SILTY, LAMINAE, GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
179.25	0.25	100		60% SANDSTONE,FINE GRAINED 20% MUDSTONE 20% SILTSTONE	MED.-FINE GRAINED, GREY. SILTY, INTERCALATIONS, GREY. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
179.42	0.17	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
179.72	0.30	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
179.77	0.05	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	ARGILLACEOUS, LENSES, GREY. LITHIC, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT DEFORMED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
180.12	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
180.47	0.35	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
180.62	0.15	100	T38	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
180.77	0.15	100	T39	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
180.94	0.17	100	T40	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
181.10	0.16	100	T41	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
181.26	0.16	100	T42	100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
183.11	1.85	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
184.05	0.94	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, BASAL CONTACT ABRUPT, WITH MUD PELLETS, WITH PLANT REMAINS, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
184.27	0.22	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT TRANSITIONAL, NON SLAKING, NON STICKY.
186.40	2.13	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	36.98 - 37.82 M	0.84 M
M1	1.59 M	71.79 - 73.79 M	2.00 M
M2	0.00 M	97.92 - 98.97 M	1.05 M
M3	0.00 M	111.29 - 112.23 M	0.94 M
L1	2.19 M	170.78 - 172.97 M	2.19 M
L2	1.91 M	174.65 - 176.56 M	1.91 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	15.58 - 15.66 M	0.08 M
T2	15.66 - 15.80 M	0.14 M
T3	71.24 - 71.42 M	0.18 M
T4	71.42 - 71.59 M	0.17 M
1	71.79 - 71.95 M	0.16 M
2	71.95 - 72.23 M	0.28 M
3	72.64 - 72.81 M	0.17 M
4	72.81 - 72.89 M	0.08 M
5	72.89 - 73.11 M	0.22 M
6	73.11 - 73.13 M	0.02 M
7	73.13 - 73.42 M	0.29 M
8	73.42 - 73.79 M	0.37 M
9	75.29 - 75.41 M	0.12 M
10	75.41 - 75.47 M	0.06 M
11	75.47 - 75.54 M	0.07 M
12	75.54 - 75.59 M	0.05 M
13	75.59 - 75.72 M	0.13 M
14	75.72 - 75.86 M	0.14 M
15	75.86 - 75.91 M	0.05 M
16	75.91 - 76.42 M	0.51 M
17	76.42 - 76.56 M	0.14 M
T5	165.55 - 165.70 M	0.15 M
T6	165.70 - 165.85 M	0.15 M
T7	165.85 - 166.00 M	0.15 M
T8	166.00 - 166.16 M	0.16 M
T9	166.40 - 166.56 M	0.16 M
T10	166.56 - 166.70 M	0.14 M
T11	166.88 - 167.04 M	0.16 M
T12	167.10 - 167.26 M	0.16 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T13	167.26 - 167.35 M	0.09 M
T14	167.35 - 167.46 M	0.11 M
T15	169.54 - 169.72 M	0.18 M
T16	169.72 - 169.82 M	0.10 M
T17	169.82 - 169.94 M	0.12 M
T18	169.94 - 170.08 M	0.14 M
T19	170.08 - 170.21 M	0.13 M
61	170.63 - 170.75 M	0.12 M
62	170.75 - 170.78 M	0.03 M
63	170.78 - 170.87 M	0.09 M
64	170.87 - 170.88 M	0.01 M
65	170.88 - 170.95 M	0.07 M
66	170.95 - 171.41 M	0.46 M
67	171.41 - 171.67 M	0.26 M
68	171.67 - 171.75 M	0.08 M
69	171.75 - 171.85 M	0.10 M
70	171.85 - 171.97 M	0.12 M
71	171.97 - 172.33 M	0.36 M
72	172.33 - 172.37 M	0.04 M
73	172.37 - 172.55 M	0.18 M
74	172.55 - 172.63 M	0.08 M
75	172.63 - 172.84 M	0.21 M
76	172.84 - 172.97 M	0.13 M
77	172.97 - 173.02 M	0.05 M
T20	173.09 - 173.28 M	0.19 M
T21	173.28 - 173.45 M	0.17 M
T22	173.67 - 173.75 M	0.08 M
T23	173.75 - 174.00 M	0.25 M
T24	174.00 - 174.16 M	0.16 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T25	174.16 - 174.24 M	0.08 M
T26	174.56 - 174.64 M	0.08 M
81	174.64 - 174.65 M	0.01 M
82	174.65 - 174.78 M	0.13 M
83	174.78 - 175.34 M	0.56 M
84	175.34 - 175.38 M	0.04 M
85	175.38 - 175.71 M	0.33 M
86	175.71 - 175.72 M	0.01 M
87	175.72 - 175.77 M	0.05 M
88	175.77 - 175.82 M	0.05 M
89	175.82 - 176.02 M	0.20 M
90	176.02 - 176.06 M	0.04 M
91	176.06 - 176.11 M	0.05 M
92	176.11 - 176.42 M	0.31 M
93	176.42 - 176.56 M	0.14 M
T27	176.60 - 176.68 M	0.08 M
T28	176.79 - 176.84 M	0.05 M
T29	176.84 - 176.90 M	0.06 M
T30	176.90 - 176.98 M	0.08 M
T31	176.98 - 177.09 M	0.11 M
T32	177.72 - 177.93 M	0.21 M
T33	177.93 - 178.06 M	0.13 M
T34	178.06 - 178.20 M	0.14 M
T35	178.20 - 178.27 M	0.07 M
T36	178.27 - 178.38 M	0.11 M
T37	178.38 - 178.48 M	0.10 M
T38	180.47 - 180.62 M	0.15 M
T39	180.62 - 180.77 M	0.15 M
T40	180.77 - 180.94 M	0.17 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T41	180.94 - 181.10 M	0.16 M
T42	181.10 - 181.26 M	0.16 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 157

HOLE TYPE	CORE
EASTING	590,888 M AM GRID
NORTHING	5,398,230 M AM GRID
ELEVATION	393.00 M
TOTAL DEPTH DRILLED	54.50 M
DRILLING STARTED	25/05/82
DRILLING TIME	5 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	41.23 M
DRILLING FLUID	BENTONITIC MUD/FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
9.50	9.50	20		80% SOIL 20% DOLERITE	ARGILLACEOUS, LIGHT BROWN. SCREE, GREY. WEATHERED TO SOIL, WEAKLY CEMENTED.
9.65	0.15	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
9.90	0.25	100	T1	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
10.70	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 14 DEG., WITH TROUGH CROSS BEDDING, MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
11.14	0.44	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
11.33	0.19	100	T2	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
11.63	0.30	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
11.85	0.22	100	T3	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
12.07	0.22	100	T4	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
12.26	0.19	100	T5	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
12.44	0.18	100	T6	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
14.70	2.26	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
14.77	0.07	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
14.95	0.18	100	T7	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC X	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
15.14	0.19	100	T8	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
15.34	0.20	100	T9	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
15.70	0.36	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
16.08	0.38	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LITHIC, INTERCALATIONS, LIGHT BROWN. FRAGMENTS, LENSES, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
16.20	0.12	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, MODERATELY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 3 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
16.28	0.08	100		60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 17 DEG., NON SLAKING, NON STICKY.
16.52	0.24	100		100% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, BROWN-BLACK, MODERATELY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 17 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
16.80	0.28	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
17.06	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
17.28	0.22	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
18.40	1.12	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
18.56	0.16	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
18.90	0.34	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.30	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., VERY WIDELY SPACED JOINTS, JOINTS DIP 72 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
19.56	0.26	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
19.78	0.22	100	T10	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
19.97	0.19	100	T11	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
20.04	0.07	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
20.18	0.14	100	T12	100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
20.32	0.14	100	T13	100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., NON SLAKING, NON STICKY.
20.38	0.06	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
20.94	0.56	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 3 DEG., WIDELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
21.20	0.26	100		95% MUDSTONE 5% COAL	SILTY, GREY. LENSES, BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
21.30	0.10	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GREY-BROWN. LENSES, GREY-GREEN. MODERATELY WEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
22.40	1.10	100		90% MUDSTONE 10% SANDSTONE,MEDIUM GRAINED	GREY-GREEN. LENSES, GREY-BROWN. MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WITH PLANT REMAINS, VERY CLOSELY SPACED JOINTS, JOINTS DIP 88 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.80	0.40	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
24.82	2.02	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
25.00	0.18	100	T14	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
25.20	0.20	100	T15	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
25.39	0.19	100	T16	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
25.62	0.23	100	T17	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
26.80	1.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
26.84	0.04	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
26.88	0.04	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 15 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
26.91	0.03	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
27.16	0.25	100	T18	100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
27.37	0.21	100	T19	100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
27.38	0.01	100	T19	100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT BROWN, HIGHLY WEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
27.44	0.06	0		CORE LOSS	
28.00	0.56	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
28.80	0.80	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
29.25	0.45	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
29.48	0.23	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
29.70	0.22	100	T20	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
29.91	0.21	100	T21	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
30.10	0.19	100	T22	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
30.29	0.19	100	T23	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.30	1.01	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.33	0.03	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.39	0.06	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.75	0.36	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 75 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
31.80	0.05	100	T25	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.92	0.12	100	T25	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
31.98	0.06	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
32.03	0.05	100	T26	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
32.37	0.34	100	T27	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
32.66	0.29	100		100% MUDSTONE	SILTY, GREY, WITH LIMONITE ON JOINTS, MODERATELY WEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 5 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 61 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
32.71	0.05	100		100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
32.88	0.17	100		100% MUDSTONE	SILTY, GREY, WITH LIMONITE ON JOINTS, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
				BASE OF WEATHERING	
33.00	0.12	100		100% SILTSTONE	GREY, WITH LIMONITE ON JOINTS, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
33.13	0.13	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.50	0.37	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.58	0.08	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.61	0.03	100	T28	100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.72	0.11	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
33.87	0.15	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
34.48	0.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
34.69	0.21	100	T29	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
35.00	0.31	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.04	0.04	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
35.24	0.20	100	T30	98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
35.36	0.12	100	T31	98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
35.50	0.14	100		98% SANDSTONE,MEDIUM GRAINED 2% CARBONACEOUS MUDSTONE	MASSIVE, LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
35.66	0.16	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, WITH LENSES OF CALCITE, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
36.88	1.22	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
37.43	0.55	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
37.67	0.24	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
37.79	0.12	100	T32	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
38.00	0.21	100	T33	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
38.20	0.20	100	T34	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
38.40	0.20	100	T35	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
38.49	0.09	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.51	0.02	100	T36	97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
39.18	0.67	100		97% SANDSTONE,MEDIUM GRAINED 3% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
39.34	0.16	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
39.46	0.12	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
39.49	0.03	0		CORE LOSS	
39.59	0.10	100		90% SANDSTONE 10% SILTSTONE	VERY FINE GRAINED, LAMINAE, GREY. CARBONACEOUS, LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
39.73	0.14	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT GREY. PELLETAL, DARK GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.00	0.27	100		100% SANDSTONE,FINE GRAINED	SILTY, LAMINAE, GREY, UNWEATHERED. WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.17	0.17	100	T37	100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.23	0.06	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.34	0.11	100	T38	90% SANDSTONE,FINE GRAINED 10% MUDSTONE	FOSSILIFERROUS, GREY-BROWN. CARBONACEOUS, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.47	0.13	100	T39	90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, LIGHT GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
40.68	0.21	100		90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, INTERCALATIONS, GREY. LAMINAE, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT EROSIONAL, BEDS DIP 2 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
40.74	0.06	100		60% CARBONACEOUS MUDSTONE 40% COAL, DULL WITH FEW BRIGHT BANDS	COALY, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.85	0.11	100	T40	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
40.88	0.03	100	61	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.92	0.04	100	61	60% CARBONACEOUS MUDSTONE 30% COAL, DULL 10% MUDSTONE	COALY, BROWN-BLACK. STREAKS, BLACK. BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
40.94	0.02	100	61	90% MUDSTONE 10% CARBONACEOUS MUDSTONE	BROWN. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 1 : 352.06 M R.L.	
40.95	0.01	100	62	97% COAL, DULL 3% MUDSTONE	BLACK. STREAKS, BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.02	0.07	100	62	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.03	0.01	100	63	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.15	0.12	100	63	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.16	0.01	100	63	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.19	0.03	100	63	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.26	0.07	100	63	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.31	0.05	100	63	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.40	0.09	100	64	100% SILTSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.46	0.06	100	65	100% SILTSTONE	ARGILLACEOUS, CARBONACEOUS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.49	0.03	100	65	60% SILTSTONE 40% SILTSTONE	STREAKS, LIGHT GREY. COALY, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.53	0.04	100	65	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
41.56	0.03	100	65	60% MUDSTONE 40% COAL, DULL	SILTY, BROWN. INTERCALATIONS, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.60	0.04	100	65	97% COAL, DULL 3% MUDSTONE	BLACK. SILTY, STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.61	0.01	100	65	100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
41.66	0.05	100	66	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
41.87	0.21	100	66	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
41.98	0.11	100	66	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.08	0.10	100	67	100% COAL, MID LUSTROUS - DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
42.11	0.03	100	67	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.16	0.05	100	67	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
42.22	0.06	100	68	60% MUDSTONE 40% COAL, DULL	SILTY, INTERCALATIONS, BROWN. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.35	0.13	100	69	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.36	0.01	100	69	100% SILTSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
42.42	0.06	100	69	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.48	0.06	100	70	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. SILTY, STREAKS, BROWN. WITH PYRITE ON JOINTS AND PYRITE ON BEDDING PLANES, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.50	0.02	100	71	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
42.52	0.02	100	71	100% COAL, MID LUSTROUS - DULL	BADLY BROKEN, BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.54	0.02	100	71	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.67	0.13	100	71	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.73 M; SAMPLED THICKNESS= 1.73 M	
42.68	0.01	100	72	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.73	0.05	100	72	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.74	0.01	100	72	50% TONSTEIN 50% COAL, HEAVY DULL	WHITE. INTERCALATIONS, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.76	0.02	100	72	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.80	0.04	100	72	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.81	0.01	100	72	100% TONSTEIN	ARGILLACEOUS, WHITE, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.82	0.01	100	72	80% TONSTEIN 20% COAL, DULL	ARGILLACEOUS, INTERCALATIONS, WHITE. INTERCALATIONS, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
42.89	0.07	100	73	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.94	0.05	100	73	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.97	0.03	100	74	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.98	0.01	100	75	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
42.99	0.01	100	75	60% COAL, HEAVY DULL 40% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
43.04	0.05	100	75	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.05	0.01	100	76	50% MUDSTONE 50% COAL, DULL	TUFFACEOUS, BANDS, LIGHT BROWN. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.09	0.04	100	76	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.12	0.03	100	76	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.18	0.06	100	77	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.21	0.03	100	77	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
43.42	0.21	100	77	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
43.44	0.02	100	78	100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.47	0.03	100	78	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT DEFORMED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.54	0.07	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.69	0.15	100	T41	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
43.92	0.23	100	T42	100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
43.97	0.05	100	T43	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
44.07	0.10	100	T43	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
44.21	0.14	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
44.32	0.11	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.49	0.17	100	T44	100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.58	0.09	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.65	0.07	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.66	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.69	0.03	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.78	0.09	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.88	0.10	100	T45	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
44.97	0.09	100	T46	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
45.06	0.09	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
45.44	0.38	100		60% SANDSTONE 40% SILTSTONE	MED.-FINE GRAINED, LIGHT GREY. ARGILLACEOUS, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
45.63	0.19	100		60% SILTSTONE 20% MUDSTONE 20% SANDSTONE,FINE GRAINED	GREY. PELLETAL, LENSES, GREY. INTERCALATIONS, STREAKS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
45.67	0.04	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
45.84	0.17	100		100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
45.95	0.11	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
45.97	0.02	100	T47	100% SILTSTONE	LAMINAE, DARK GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.08	0.11	100	T47	99% SANDSTONE 1% SILTSTONE	MED.-FINE GRAINED, GREY. STREAKS, DARK GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
46.20	0.12	100	T48	100% SILTSTONE	ARGILLACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.21	0.01	100	T49	100% SILTSTONE	ARGILLACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.37	0.16	100	T49	100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.38	0.01	100	T49	100% SILTSTONE	ARGILLACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.45	0.07	100		100% SILTSTONE	ARGILLACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.60	0.15	100	T50	80% SILTSTONE 20% SANDSTONE	ARGILLACEOUS, DARK GREY. VERY FINE GRAINED, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.66	0.06	100		80% SILTSTONE 20% SANDSTONE	ARGILLACEOUS, DARK GREY. VERY FINE GRAINED, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.73	0.07	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
46.85	0.12	100		80% SILTSTONE 20% SANDSTONE	DARK GREY. VERY FINE GRAINED, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
46.94	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
47.18	0.24	100	T51	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.21	0.03	100	T52	70% MUDSTONE 30% SANDSTONE	LENSES, PELLETAL, GREY. VERY FINE GRAINED, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.30	0.09	100	T52	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 2 : 345.70 M R.L.	
47.37	0.07	100	81	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
47.42	0.05	100	82	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
47.46	0.04	100	82	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.65	0.19	100	82	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.66	0.01	100	82	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.69	0.03	100	82	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.70	0.01	100	82	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.82	0.12	100	83	100% CLAYSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 44 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, MODERATELY STICKY.
47.86	0.04	100	84	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
47.88	0.02	100	84	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
48.00	0.12	100	84	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
48.02	0.02	100	84	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.09	0.07	100	84	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
48.14	0.05	0	84	CORE LOSS	
48.20	0.06	100	85	100% CLAYSTONE	GREY-GREEN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, MODERATELY STICKY.
48.22	0.02	100	85	100% CLAYSTONE	CREAM, UNWEATHERED, STIFF, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
48.25	0.03	100	85	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.35	0.10	100	85	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.39	0.04	100	86	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.41	0.02	100	86	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.46	0.05	0	86	CORE LOSS	
48.51	0.05	100	86	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
48.57	0.06	100	87	100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., RAPID SLAKING, NON STICKY.
48.63	0.06	100	88	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.66	0.03	100	89	100% CARBONACEOUS MUDSTONE	BADLY BROKEN, BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.69	0.03	100	90	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
48.72	0.03	100	90	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
48.76	0.04	100	90	100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.46 M; SAMPLED THICKNESS= 1.46 M	
48.83	0.07	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
48.93	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.13	0.20	100	T53	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.34	0.21	100	T54	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.71	0.37	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.79	0.08	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
49.94	0.15	100	T55	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
50.11	0.17	100	T56	60% SILTSTONE 40% SANDSTONE	GREY. VERY FINE GRAINED, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
50.34	0.23	100	T57	60% SANDSTONE 40% SILTSTONE	VERY FINE GRAINED, GREY. INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
51.21	0.87	100		70% SANDSTONE,FINE GRAINED 30% SILTSTONE	GREY. GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
53.20	1.99	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
53.67	0.47	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
54.50	0.83	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	1.73 M	40.94 - 42.67 M	1.73 M
L2	1.46 M	47.30 - 48.76 M	1.46 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	9.65 - 9.90 M	0.25 M
T2	11.14 - 11.33 M	0.19 M
T3	11.63 - 11.85 M	0.22 M
T4	11.85 - 12.07 M	0.22 M
T5	12.07 - 12.26 M	0.19 M
T6	12.26 - 12.44 M	0.18 M
T7	14.77 - 14.95 M	0.18 M
T8	14.95 - 15.14 M	0.19 M
T9	15.14 - 15.34 M	0.20 M
T10	19.56 - 19.78 M	0.22 M
T11	19.78 - 19.97 M	0.19 M
T12	20.04 - 20.18 M	0.14 M
T13	20.18 - 20.32 M	0.14 M
T14	24.82 - 25.00 M	0.18 M
T15	25.00 - 25.20 M	0.20 M
T16	25.20 - 25.39 M	0.19 M
T17	25.39 - 25.62 M	0.23 M
T18	26.91 - 27.16 M	0.25 M
T19	27.16 - 27.38 M	0.22 M
T20	29.48 - 29.70 M	0.22 M
T21	29.70 - 29.91 M	0.21 M
T22	29.91 - 30.10 M	0.19 M
T23	30.10 - 30.29 M	0.19 M
T25	31.75 - 31.92 M	0.17 M
T26	31.98 - 32.03 M	0.05 M
T27	32.03 - 32.37 M	0.34 M
T28	33.58 - 33.61 M	0.03 M
T29	34.48 - 34.69 M	0.21 M
T30	35.04 - 35.24 M	0.20 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T31	35.24 - 35.36 M	0.12 M
T32	37.67 - 37.79 M	0.12 M
T33	37.79 - 38.00 M	0.21 M
T34	38.00 - 38.20 M	0.20 M
T35	38.20 - 38.40 M	0.20 M
T36	38.49 - 38.51 M	0.02 M
T37	40.00 - 40.17 M	0.17 M
T38	40.23 - 40.34 M	0.11 M
T39	40.34 - 40.47 M	0.13 M
T40	40.74 - 40.85 M	0.11 M
61	40.85 - 40.94 M	0.09 M
62	40.94 - 41.02 M	0.08 M
63	41.02 - 41.31 M	0.29 M
64	41.31 - 41.40 M	0.09 M
65	41.40 - 41.61 M	0.21 M
66	41.61 - 41.98 M	0.37 M
67	41.98 - 42.16 M	0.18 M
68	42.16 - 42.22 M	0.06 M
69	42.22 - 42.42 M	0.20 M
70	42.42 - 42.48 M	0.06 M
71	42.48 - 42.67 M	0.19 M
72	42.67 - 42.82 M	0.15 M
73	42.82 - 42.94 M	0.12 M
74	42.94 - 42.97 M	0.03 M
75	42.97 - 43.04 M	0.07 M
76	43.04 - 43.12 M	0.08 M
77	43.12 - 43.42 M	0.30 M
78	43.42 - 43.47 M	0.05 M
T41	43.54 - 43.69 M	0.15 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T42	43.69 - 43.92 M	0.23 M
T43	43.92 - 44.07 M	0.15 M
T44	44.32 - 44.49 M	0.17 M
T45	44.78 - 44.88 M	0.10 M
T46	44.88 - 44.97 M	0.09 M
T47	45.95 - 46.08 M	0.13 M
T48	46.08 - 46.20 M	0.12 M
T49	46.20 - 46.38 M	0.18 M
T50	46.45 - 46.60 M	0.15 M
T51	46.94 - 47.18 M	0.24 M
T52	47.18 - 47.30 M	0.12 M
81	47.30 - 47.37 M	0.07 M
82	47.37 - 47.70 M	0.33 M
83	47.70 - 47.82 M	0.12 M
84	47.82 - 48.14 M	0.32 M
85	48.14 - 48.35 M	0.21 M
86	48.35 - 48.51 M	0.16 M
87	48.51 - 48.57 M	0.06 M
88	48.57 - 48.63 M	0.06 M
89	48.63 - 48.66 M	0.03 M
90	48.66 - 48.76 M	0.10 M
T53	48.93 - 49.13 M	0.20 M
T54	49.13 - 49.34 M	0.21 M
T55	49.79 - 49.94 M	0.15 M
T56	49.94 - 50.11 M	0.17 M
T57	50.11 - 50.34 M	0.23 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 164

HOLE TYPE	CORE
EASTING	590,845 M AM GRID
NORTHING	5,398,162 M AM GRID
ELEVATION	355.76 M
TOTAL DEPTH DRILLED	18.23 M
DRILLING STARTED	03/06/82
DRILLING TIME	1 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
4.23	4.23	20		80% SOIL 20% DOLERITE	ARGILLACEOUS, LIGHT BROWN. SCREE, GREY. WEATHERED TO SOIL, WEAKLY CEMENTED.
5.03	0.80	20		80% SAND 20% DOLERITE	SOIL, LIGHT BROWN. SCREE, GREY.
			TOP OF MT. NICHOLAS LOWER 1 : 350.73 M R.L.		
5.23	0.20	0		CORE LOSS	
5.37	0.14	100		100% CARBONACEOUS MUDSTONE	ARGILLACEOUS, BROWN-BLACK, HIGHLY WEATHERED, VERY WEAK ROCK.
			BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 0.34 M; SAMPLED THICKNESS= 0.00 M		
5.38	0.01	100		100% MUDSTONE	ARGILLACEOUS, GREY, HIGHLY WEATHERED, VERY WEAK ROCK.
5.54	0.16	0		CORE LOSS	
5.63	0.09	100		100% MUDSTONE	ARGILLACEOUS, GREY, HIGHLY WEATHERED, STIFF.
5.83	0.20	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
5.88	0.05	10		100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
6.53	0.65	0		CORE LOSS	
6.59	0.06	50		100% MUDSTONE	ARGILLACEOUS, GREY-BROWN, HIGHLY WEATHERED, STIFF.
6.73	0.14	0		CORE LOSS	
6.91	0.18	100		100% MUDSTONE	SILTY, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
7.01	0.10	0		CORE LOSS	
7.11	0.10	100		100% SILTSTONE	ARGILLACEOUS, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
7.96	0.85	100		100% MUDSTONE	SILTY, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
8.06	0.10	0		CORE LOSS	
8.12	0.06	0		CORE LOSS	
8.32	0.20	100		100% SANDSTONE,FINE GRAINED	BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
8.55	0.23	100		100% SANDSTONE,FINE GRAINED	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
8.65	0.10	100		100% MUDSTONE	SILTY, GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
8.68	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
8.80	0.12	33		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
9.52	0.72	0		CORE LOSS	
				TOP OF MT. NICHOLAS LOWER 2 : 346.24 M R.L.	
9.56	0.04	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.92	1.36	0		CORE LOSS	
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.40 M; SAMPLED THICKNESS= 0.00 M	
11.40	0.48	0		CORE LOSS	
12.23	0.83			100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK.
12.60	0.37	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
13.83	1.23	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED.
14.10	0.27	100		100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK.
18.23	4.13	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	5.03 - 5.37 M	0.34 M
L2	0.00 M	9.52 - 10.92 M	1.40 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 167

HOLE TYPE	CORE
EASTING	591,800 M AM GRID
NORTHING	5,398,660 M AM GRID
ELEVATION	468.74 M
TOTAL DEPTH DRILLED	45.40 M
DRILLING STARTED	11/06/82
DRILLING TIME	2 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	35.60 M
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.95	4.95	10		100% DOLERITE	SCREE, GREY-BROWN, WEATHERED TO SOIL, WEAKLY CEMENTED.
5.30	0.35	100		100% CLAY	GREY, WEATHERED TO SOIL, STIFF.
5.44	0.14	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, GREY-BROWN. STREAKS, BROWN-BLACK. COMPLETELY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH CROSS LAMINATION.
6.38	0.94	100		100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, THICKLY BEDDED, BEDS DIP 2 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES, SLOW SLAKING, NON STICKY.
6.40	0.02	0		CORE LOSS	
6.50	0.10	100		100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
6.65	0.15	100	T1	100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
7.56	0.91	100		100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
7.70	0.14	100	T2	100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
7.86	0.16	100	T3	100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
7.94	0.08	100	T4	100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
8.10	0.16	100		100% MUDSTONE	ARGILLACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., SLOW SLAKING, NON STICKY.
8.23	0.13	100		90% MUDSTONE 10% SILTSTONE	ARGILLACEOUS, GREY. STREAKS, LIGHT GREY. MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
8.36	0.13	100	T5	90% MUDSTONE 10% SILTSTONE	ARGILLACEOUS, GREY. STREAKS, LIGHT GREY. MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
8.48	0.12	100	T6	85% MUDSTONE 10% SILTSTONE 5% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY. STREAKS, LIGHT GREY. LENSES, LIGHT GREY. MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
9.34	0.86	100		85% MUDSTONE 10% SILTSTONE 5% SANDSTONE,FINE GRAINED	ARGILLACEOUS, GREY. STREAKS, LIGHT GREY. LENSES, LIGHT GREY. MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
9.40	0.06	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
9.42	0.02	100		100% CLAYSTONE	CREAM, MODERATELY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
9.51	0.09	100	T7	90% CARBONACEOUS MUDSTONE 10% SILTSTONE	COALY, BROWN-BLACK. STREAKS, LIGHT GREY. MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
9.67	0.16	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
9.87	0.20	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	GREY. LAMINAE, BROWN-BLACK. MODERATELY WEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
9.97	0.10	100	T8	100% MUDSTONE	CARBONACEOUS, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
10.27	0.30	100		100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
10.43	0.16	100	T9	100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
10.45	0.02	100		100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
11.01	0.56	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
11.25	0.24	100		100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
11.45	0.20	100	T10	100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
11.60	0.15	100		100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.77	0.17	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
12.30	0.53	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
12.40	0.10	0		CORE LOSS	
12.64	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
12.80	0.16	100		100% MUDSTONE	GREY, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
12.96	0.16	100		100% MUDSTONE	BADLY BROKEN, GREY, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
12.97	0.01	0		CORE LOSS	
12.98	0.01	100		80% MUDSTONE 20% COAL, DULL	BROWN. INTERCALATIONS, BLACK. MODERATELY WEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.07	0.09	100		100% COAL, DULL	BLACK, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.08	0.01	0		CORE LOSS	
13.09	0.01	100		100% MUDSTONE	BROWN, MODERATELY WEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.16	0.07	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.30	0.14	100		100% MUDSTONE	BROWN, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.43	0.13	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
13.44	0.01	100	T11	100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.62	0.18	100	T11	100% MUDSTONE	CARBONACEOUS, DARK BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
13.84	0.22	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, HIGHLY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.93	0.09	100		100% MUDSTONE	LIGHT BROWN, HIGHLY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
14.50	0.57	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, HIGHLY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
14.90	0.40	100		60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	GREY-GREEN. COALY, LENSES, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
15.02	0.12	100	T12	60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	GREY-GREEN. COALY, LENSES, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
15.17	0.15	100	T13	60% CLAYSTONE 40% CARBONACEOUS MUDSTONE	GREY-GREEN. COALY, LENSES, BLACK. HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
15.21	0.04	100		60% COAL, DULL 40% MUDSTONE	BLACK. INTERCALATIONS, GREY. HIGHLY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
15.25	0.04	100		90% MUDSTONE 10% COAL	SILTY, FOSSILIFERROUS, GREY-BROWN. FRAGMENTS, BLACK. HIGHLY WEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
15.40	0.15	0		CORE LOSS	
15.49	0.09	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
15.62	0.13	100	T14	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
15.79	0.17	100	T15	100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
15.97	0.18	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
16.20	0.23	100		60% MUDSTONE 40% SILTSTONE	ARGILLACEOUS, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH DISTURBED BEDDING, SLOW SLAKING, NON STICKY.
17.21	1.01	100		100% MUDSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT NON PLANAR, SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
17.76	0.55	100		90% CARBONACEOUS MUDSTONE 10% MUDSTONE	BROWN-BLACK. LENSES, PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
17.86	0.10	100	T16	100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
17.94	0.08	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
18.01	0.07	100		100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
18.40	0.39	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
18.58	0.18	100	T17	100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
18.64	0.06	100		100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
18.75	0.11	100	T18	100% SILTSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
18.86	0.11	100	T19	100% SILTSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.20	0.34	100		90% MUDSTONE 10% SILTSTONE	CARBONACEOUS, GREY-BROWN. FOSSILIFERROUS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.29	0.09	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.42	0.13	100		80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY-BROWN. INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
20.06	0.64	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
20.20	0.14	100	T20	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
20.36	0.16	100	T21	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
21.40	1.04	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
21.51	0.11	100	T22	100% SILTSTONE	ARGILLACEOUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.40	0.89	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
23.50	1.10	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTY, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
23.65	0.15	100	T23	100% SANDSTONE,MEDIUM GRAINED	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
23.90	0.25	100		50% MUDSTONE 50% SANDSTONE,FINE GRAINED	SILTY, GREY. INTERCALATIONS, LIGHT GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
24.78	0.88	100		100% SANDSTONE,FINE GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
24.80	0.02	100	T24	80% SANDSTONE,FINE GRAINED 20% MUDSTONE	LIGHT BROWN. STREAKS, LIGHT GREY. HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
24.94	0.14	100	T24	100% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
26.22	1.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
26.34	0.12	100	T25	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
27.40	1.06	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
27.58	0.18	100	T26	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
27.76	0.18	100	T27	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
29.29	1.53	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
29.47	0.18	100	T28	100% SANDSTONE,FINE GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.64	0.17	100	T29	100% SANDSTONE,FINE GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
30.20	0.56	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
30.86	0.66	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	MASSIVE, GREY-BROWN. FRAGMENTS, BLACK. MODERATELY WEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 20 DEG., WITH TROUGH CROSS BEDDING, NON SLAKING, NON STICKY.
31.21	0.35	100		100% MUDSTONE	SILTY, GREY, MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
31.51	0.30	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	SILTY, GREY. SILTY, INTERCALATIONS, GREY. MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
31.67	0.16	100	T30	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
31.85	0.18	100	T31	100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
32.71	0.86	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	SILTY, GREY. SILTY, INTERCALATIONS, GREY. MODERATELY WEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
32.78	0.07	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, MODERATELY WEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
33.60	0.82	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
33.71	0.11	100	T32	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
33.83	0.12	100	T33	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.03	0.20	100	T34	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
34.13	0.10	100	T35	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, VERY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

BASE OF WEATHERING

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.33	1.20	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.45	0.12	100	T36	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.63	0.18	100	T37	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
35.81	0.18	100	T38	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
36.01	0.20	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
36.20	0.19	100	T39	80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. COALY, LENSES, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
36.60	0.40	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 10 DEG., WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
36.83	0.23	100		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	LENSES, GREY. LITHIC, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
36.99	0.16	100		100% MUDSTONE	CARBONACEOUS, LENSES, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.15	0.16	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.16	0.01	100		100% MUDSTONE	FOSSILIFERROUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
			TOP OF MT. NICHOLAS MIDDLE 1 : 431.58 M R.L.		
37.17	0.01	100	1	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.22	0.05	100	1	100% COAL, HEAVY DULL	ARGILLACEOUS, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.24	0.02	100	1	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
37.56	0.32	100	2	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.59	0.03	100	3	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.64	0.05	100	4	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.75	0.11	100	4	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.76	0.01	0	4	CORE LOSS	
37.82	0.06	100	5	100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.84	0.02	100	5	100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
37.91	0.07	100	6	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
37.96	0.05	100	6	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.00	0.04	100	6	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.10	0.10	100	6	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.11	0.01	100	7	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.14	0.03	100	7	100% MUDSTONE	PELLETAL, LENSES, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.19	0.05	100	7	80% CARBONACEOUS MUDSTONE 20% MUDSTONE	COALY, BROWN-BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
38.26	0.07	100	8	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.43	0.17	100	8	100% COAL, DULL WITH FEW BRIGHT BANDS	UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.44	0.01	100	8	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.66	0.22	100	8	100% COAL, DULL	BLACK, UNWEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
38.77	0.11	100	9	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, PELLETAL, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.61 M; SAMPLED THICKNESS= 1.61 M	
38.79	0.02	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
39.09	0.30	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
39.13	0.04	100		60% MUDSTONE 40% CARBONACEOUS MUDSTONE	SILTY, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.17	0.04	100		100% CLAYSTONE	FOSSILIFERROUS, CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.18	0.01	100	10	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.24	0.06	100	10	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.31	0.07	100	10	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.47	0.16	100	11	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.48	0.01	100	12	60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BROWN-BLACK. BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.49	0.01	100	12	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
39.61	0.12	100	13	70% COAL, DULL 25% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BROWN-BLACK. LIGHT BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.69	0.08	100	13	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.85	0.16	100	13	70% COAL, DULL 27% CARBONACEOUS MUDSTONE 3% MUDSTONE	BLACK. BROWN-BLACK. LIGHT BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.91	0.06	100	14	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
39.98	0.07	100	15	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.20	0.22	100	15	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
40.23	0.03	100	16	100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.26	0.03	100	16	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.29	0.03	100	16	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.34	0.05	100	16	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.60	0.26	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
40.85	0.25	100	T40	100% MUDSTONE	ARGILLACEOUS, FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
41.00	0.15	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
41.06	0.06	100	T41	100% SILTSTONE	GRADING TO, FINE GRAINED SANDSTONE, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
41.32	0.26	100	T41	100% SANDSTONE,FINE GRAINED	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
41.61	0.29	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
41.81	0.20	100	T42	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
42.28	0.47	100		100% SANDSTONE,FINE GRAINED	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.40	2.12	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.55	0.15	100	T43	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
45.40	0.85	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	1.61 M	37.16 - 38.77 M	1.61 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	6.50 - 6.65 M	0.15 M
T2	7.56 - 7.70 M	0.14 M
T3	7.70 - 7.86 M	0.16 M
T4	7.86 - 7.94 M	0.08 M
T5	8.23 - 8.36 M	0.13 M
T6	8.36 - 8.48 M	0.12 M
T7	9.42 - 9.51 M	0.09 M
T8	9.87 - 9.97 M	0.10 M
T9	10.27 - 10.43 M	0.16 M
T10	11.25 - 11.45 M	0.20 M
T11	13.43 - 13.62 M	0.19 M
T12	14.90 - 15.02 M	0.12 M
T13	15.02 - 15.17 M	0.15 M
T14	15.49 - 15.62 M	0.13 M
T15	15.62 - 15.79 M	0.17 M
T16	17.76 - 17.86 M	0.10 M
T17	18.40 - 18.58 M	0.18 M
T18	18.64 - 18.75 M	0.11 M
T19	18.75 - 18.86 M	0.11 M
T20	20.06 - 20.20 M	0.14 M
T21	20.20 - 20.36 M	0.16 M
T22	21.40 - 21.51 M	0.11 M
T23	23.50 - 23.65 M	0.15 M
T24	24.78 - 24.94 M	0.16 M
T25	26.22 - 26.34 M	0.12 M
T26	27.40 - 27.58 M	0.18 M
T27	27.58 - 27.76 M	0.18 M
T28	29.29 - 29.47 M	0.18 M
T29	29.47 - 29.64 M	0.17 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T30	31.51 - 31.67 M	0.16 M
T31	31.67 - 31.85 M	0.18 M
T32	33.60 - 33.71 M	0.11 M
T33	33.71 - 33.83 M	0.12 M
T34	33.83 - 34.03 M	0.20 M
T35	34.03 - 34.13 M	0.10 M
T36	35.33 - 35.45 M	0.12 M
T37	35.45 - 35.63 M	0.18 M
T38	35.63 - 35.81 M	0.18 M
T39	36.01 - 36.20 M	0.19 M
1	37.16 - 37.24 M	0.08 M
2	37.24 - 37.56 M	0.32 M
3	37.56 - 37.59 M	0.03 M
4	37.59 - 37.76 M	0.17 M
5	37.76 - 37.84 M	0.08 M
6	37.84 - 38.10 M	0.26 M
7	38.10 - 38.19 M	0.09 M
8	38.19 - 38.66 M	0.47 M
9	38.66 - 38.77 M	0.11 M
10	39.17 - 39.31 M	0.14 M
11	39.31 - 39.47 M	0.16 M
12	39.47 - 39.49 M	0.02 M
13	39.49 - 39.85 M	0.36 M
14	39.85 - 39.91 M	0.06 M
15	39.91 - 40.20 M	0.29 M
16	40.20 - 40.34 M	0.14 M
T40	40.60 - 40.85 M	0.25 M
T41	41.00 - 41.32 M	0.32 M
T42	41.61 - 41.81 M	0.20 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T43	44.40 - 44.55 M	0.15 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 168

HOLE TYPE	CORE
EASTING	590,963 M AM GRID
NORTHING	5,398,889 M AM GRID
ELEVATION	472.65 M
TOTAL DEPTH DRILLED	132.43 M
DRILLING STARTED	17/06/82
DRILLING TIME	3 DAYS
CORE SIZE	61.1 MM
HOLE SIZE	96.1 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	74.60 M
DRILLING FLUID	FRESH WATER
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.38	0.38	1		100% SOIL	ARGILLACEOUS, LIGHT BROWN, WEATHERED TO SOIL, STIFF.
0.53	0.15	100		80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF.
0.73	0.20	100		80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF.
0.85	0.12	100		80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF.
1.05	0.20	100	T02	80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF.
1.25	0.20	100	T03	80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF.
2.30	1.05	100		80% CLAY 10% SANDSTONE 10% COAL	SOIL, LIGHT BROWN. SOIL. FRAGMENTS, SOIL, BLACK. WEATHERED TO SOIL, STIFF, BASAL CONTACT ABRUPT.
3.10	0.80	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, COMPLETELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., DISCONTINUITIES INFILLED WITH SOIL (<1.
3.38	0.28	100		100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED.
4.73	1.35	100		100% MUDSTONE	SILTY, GREY-BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED.
6.38	1.65	100		90% SANDSTONE,FINE GRAINED 10% MUDSTONE	LIGHT BROWN. SILTY, INTERCALATIONS, BROWN. HIGHLY WEATHERED, VERY WEAK ROCK, MEDIUM BEDDED, NON SLAKING, NON STICKY.
7.25	0.87	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
7.48	0.23	100	T04	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
7.85	0.37	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
8.03	0.18	100	T05	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
10.22	2.19	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
10.43	0.21	100	T06	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
10.59	0.16	100	T07	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
10.69	0.10	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
10.84	0.15	100	T08	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
11.02	0.18	100	T09	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
11.19	0.17	100	T10	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
11.21	0.02	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
11.38	0.17	100	T11	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
11.58	0.20	100	T12	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
15.10	3.52	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK, VERY THICKLY BEDDED, NON SLAKING, NON STICKY.
15.88	0.78	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, NON SLAKING, NON STICKY.
16.50	0.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, MODERATELY WEATHERED, VERY WEAK ROCK, THICKLY BEDDED, MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
17.00	0.50	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
17.38	0.38	100		70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	LITHIC, GREY. INTERCALATIONS, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
17.88	0.50	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	LITHIC, GREY. INTERCALATIONS, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
18.04	0.16	100	T13	70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	LITHIC, GREY. INTERCALATIONS, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
18.08	0.04	100		70% SANDSTONE,MEDIUM GRAINED 30% CARBONACEOUS MUDSTONE	LITHIC, GREY. INTERCALATIONS, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
18.18	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
18.38	0.20	100	T14	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
18.43	0.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
18.69	0.26	100	T14	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
18.85	0.16	100	T15	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.05	0.20	100	T16	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.50	0.45	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
19.70	0.20	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
19.90	0.20	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
19.95	0.05	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS, GREY. SILTY, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
20.06	0.11	100		100% MUDSTONE	ARGILLACEOUS, LENSES, GREY-GREEN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, MODERATELY STICKY.
20.10	0.04	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LITHIC, GREY. LENSES, FRAGMENTS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
21.64	1.54	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
21.70	0.06	100		100% MUDSTONE	SILTY, LENSES, DARK GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
21.81	0.11	100		100% SANDSTONE,COARSE GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
21.88	0.07	100		95% COAL, DULL WITH FEW BRIGHT BANDS 5% SANDSTONE,MEDIUM GRAINED	BLACK. LENSES, STREAKS, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
21.93	0.05	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.09	0.16	100	T17	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.27	0.18	100	T18	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.44	0.17	100	T19	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.56	0.12	100		80% SANDSTONE,FINE GRAINED 20% SANDSTONE,MEDIUM GRAINED	LIGHT BROWN. LITHIC, LENSES, GREY. WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
				BASE OF WEATHERING	
				TOP OF MT. NICHOLAS MIDDLE 1 : 450.09 M R.L.	
22.58	0.02	100	1	60% COAL, DULL 40% SILTSTONE	INTERCALATIONS, BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
22.68	0.10	100	1	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
22.72	0.04	100	1	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
22.78	0.06	100	2	100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, MODERATELY STICKY.
22.88	0.10	100	3	100% COAL, MID LUSTROUS - DULL	ARGILLACEOUS, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
22.95	0.07	100	3	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.02	0.07	100	4	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.07	0.05	100	5	100% MUDSTONE	FOSSILIFERROUS, ARGILLACEOUS, BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.09	0.02	100	6	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.11	0.02	100	6	100% CLAYSTONE	FOSSILIFERROUS, TUFFACEOUS, CREAM, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.18	0.07	100	7	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, BANDS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.20	0.02	100	7	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.38	0.18	100	8	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
23.39	0.01	100	8	70% COAL, DULL WITH NUMEROUS BRIGHT BANDS 30% MUDSTONE	BLACK. STREAKS, PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
23.60	0.21	100	9	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.69	0.09	100	9	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
23.70	0.01	100	10	100% CARBONACEOUS MUDSTONE	COALY, DARK BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
23.73	0.03	100	10	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.17 M; SAMPLED THICKNESS= 1.17 M	
23.74	0.01	0		CORE LOSS	
23.84	0.10	100	T20	100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
24.40	0.56	0		CORE LOSS	
24.60	0.20	100	T21	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
24.80	0.20	100	T22	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
25.12	0.32	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
26.12	1.00	0		CORE LOSS	
27.30	1.18	0		CORE LOSS	
27.38	0.08	0		CORE LOSS	
27.68	0.30	100		70% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,FINE GRAINED	GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
28.70	1.02	50		70% SANDSTONE,MEDIUM GRAINED 30% SANDSTONE,FINE GRAINED	GREY. SILTY, INTERCALATIONS, GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
28.79	0.09	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
28.90	0.11	100		100% MUDSTONE	SILTY, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
29.41	0.51	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
29.76	0.35	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
29.97	0.21	0		CORE LOSS	
30.37	0.40	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
30.38	0.01	0		CORE LOSS	
35.00	4.62	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
36.00	1.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
42.65	6.65	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
42.79	0.14	100	T23	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
42.93	0.14	100	T24	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.08	0.15	100	T25	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.23	0.15	100	T26	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.36	0.13	100	T27	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.51	0.15	100	T28	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.66	0.15	100	T29	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
43.78	0.12	100	T30	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
43.94	0.16	100	T31	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.10	0.16	100	T32	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.26	0.16	100	T33	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.41	0.15	100	T34	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.58	0.17	100	T35	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.72	0.14	100	T36	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
44.87	0.15	100	T37	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
48.71	3.84	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
49.05	0.34	100		100% MUDSTONE	ARGILLACEOUS, LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
49.20	0.15	100		85% CARBONACEOUS MUDSTONE 15% MUDSTONE	BROWN-BLACK. ARGILLACEOUS, LAMINAE, VARIAGATED COLOUR. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
49.22	0.02	100		100% MUDSTONE	ARGILLACEOUS, LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
49.28	0.06	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 2 : 423.37 M R.L.	
49.32	0.0[illegible]	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.38	0.06	100		70% COAL, DULL WITH FEW BRIGHT BANDS 30% CARBONACEOUS MUDSTONE	BLACK. INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
49.41	0.03	100		100% MUDSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.43	0.02	100		70% COAL, DULL WITH FEW BRIGHT BANDS 30% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.47	0.04	100		80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	COALY, BROWN-BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.48	0.01	100		80% MUDSTONE 20% COAL, DULL	BANDS, LIGHT BROWN. BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.75	0.27	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH SAND LINEATION, NON SLAKING, NON STICKY.
49.78	0.03	100		90% COAL, DULL 10% SILTSTONE	BLACK. DISSEMINATED, GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.79	0.01	100		100% SILTSTONE	CARBONACEOUS, BANDS, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.81	0.02	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.95	0.14	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
49.98	0.03	100		100% CLAYSTONE	LIGHT GREY, UNWEATHERED, VERY WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
50.02	0.04	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
50.04	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.76 M; SAMPLED THICKNESS= 0.00 M	
50.07	0.03	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., SLOW SLAKING, NON STICKY.
50.23	0.16	100		100% CLAYSTONE	FOSSILIFERROUS, EARTHY, BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH ROOTLET BEDS, SLOW SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
50.31	0.08	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
50.40	0.09	100		60% MUDSTONE 40% SILTSTONE	PELLETAL, LENSES, LIGHT BROWN. FOSSILIFERROUS, GREY-BROWN. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
50.55	0.15	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
55.17	4.62	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
57.48	2.31	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
58.95	1.47	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
59.08	0.13	100		85% SANDSTONE,MEDIUM GRAINED 15% CARBONACEOUS MUDSTONE	LITHIC, GREY. LAMINAE, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
63.00	3.92	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS MIDDLE 3 : 409.65 M R.L.	
63.25	0.25	100		100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
63.26	0.01	100		60% COAL, MID LUSTROUS - DULL 40% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.36	0.10	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT EROSIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.46	0.10	100		100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.48	0.02	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.50	0.02	100		100% CARBONACEOUS MUDSTONE	COALY, BADLY BROKEN, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.64	0.14	100		100% MUDSTONE	FOSSILIFERROUS, BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.65	0.01	100		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	FOSSILIFERROUS, BROWN. COALY, INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
63.80	0.15	100		70% COAL, DULL 30% CARBONACEOUS MUDSTONE	BLACK. COALY, INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.85	0.05	100		70% COAL, DULL 20% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. COALY, INTERCALATIONS, BROWN-BLACK. STREAKS, LAMINAE, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
63.86	0.01	100		100% MUDSTONE	LENSES, GREY, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
63.90	0.04	100		70% COAL, DULL 30% CARBONACEOUS MUDSTONE	BLACK. COALY, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 0.90 M; SAMPLED THICKNESS= 0.00 M	
63.95	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
66.03	2.08	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 5 DEG., WITH PLANT REMAINS, WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
66.31	0.28	100		90% SILTSTONE 10% CARBONACEOUS MUDSTONE	INTERCALATIONS, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 5 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
68.97	2.66	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
69.07	0.10	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
69.66	0.59	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
69.90	0.24	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
76.18	6.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
76.58	0.40	100		100% SANDSTONE,FINE GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
77.42	0.84	100		95% SILTSTONE 5% COAL	CALCAREOUS, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., WITH MUD CASTS/CRACKS, NON SLAKING, NON STICKY.
77.52	0.10	100		95% SANDSTONE,FINE GRAINED 5% COAL	LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
77.66	0.14	100		90% SANDSTONE,MEDIUM GRAINED 5% COAL 5% MUDSTONE	LITHIC, GREY. FRAGMENTS, BLACK. LENSES, PELLETAL, DARK GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
80.95	3.29	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
81.16	0.21	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
84.43	3.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
84.69	0.26	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
91.80	7.11	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
92.00	0.20	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
92.30	0.30	0		CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
92.60	0.30	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	MASSIVE, LITHIC, GREY. FRAGMENTS, BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
95.41	2.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY.
95.59	0.18	100		90% CARBONACEOUS MUDSTONE 10% COAL	LENSES, BROWN-BLACK. LENSES, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
95.86	0.27	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
95.87	0.01	100		100% COAL, HEAVY DULL	LENSES, BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
96.36	0.49	100		90% MUDSTONE 10% SILTSTONE	SILTY, GREY. STREAKS, LAMINAE, LIGHT GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
100.17	3.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., WITH PLANT REMAINS, WITH MUD PELLETS, NON SLAKING, NON STICKY.
100.44	0.27	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	GREY. LENSES, PELLETAL, DARK GREY. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
101.40	0.96	100		100% SANDSTONE,MEDIUM GRAINED	CALCAREOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
102.10	0.70	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
102.85	0.75	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCAREOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
105.10	2.25	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
105.30	0.20	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. LAMINAE, STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 7 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
106.65	1.35	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
106.90	0.25	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LITHIC, GREY. LENSES, PELLETAL, GREY. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
107.60	0.70	100		95% SANDSTONE 5% MUDSTONE	MED.-FINE GRAINED, GREY. CARBONACEOUS, STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
108.21	0.61	100		100% SANDSTONE,COARSE GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 2 DEG., WITH MUD PELLETS, NON SLAKING, NON STICKY.
108.35	0.14	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
108.96	0.61	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., WITH DISTURBED BEDDING, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
111.10	2.14	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BEDS DIP 2 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
111.60	0.50	100		60% SANDSTONE 40% MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, GREY. SILTY, INTERCALATIONS, GREY. WITH LENSES OF CALCITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
112.51	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
112.57	0.06	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
113.57	1.00	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
113.80	0.23	100		100% SANDSTONE,MEDIUM GRAINED	FOSSILIFERROUS, CALCAREOUS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
116.08	2.28	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LITHIC, GREY, UNWEATHERED, WEAK ROCK, VERY THICKLY BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
116.43	0.35	100		95% SANDSTONE,FINE GRAINED 5% CARBONACEOUS MUDSTONE	GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., WITH CROSS LAMINATION, NON SLAKING, NON STICKY.
116.67	0.24	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
116.93	0.26	100		70% MUDSTONE 30% SILTSTONE	CARBONACEOUS, LAMINAE, DARK BROWN. ARGILLACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, NON SLAKING, NON STICKY.
117.10	0.17	100		85% MUDSTONE 15% SILTSTONE	CARBONACEOUS, DARK BROWN. ARGILLACEOUS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 5 DEG., WITH DISTURBED BEDDING, WITH SLUMP STRUCTURES, NON SLAKING, NON STICKY.
117.30	0.20	100		100% MUDSTONE	CARBONACEOUS, DARK BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
117.34	0.04	100		100% SILTSTONE	ARGILLACEOUS, FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
117.45	0.11	100		100% MUDSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
117.55	0.10	100	T38	100% MUDSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
117.67	0.12	100	T39	100% MUDSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
117.77	0.10	100	T40	100% MUDSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
117.81	0.04	100		100% MUDSTONE	LAMINAE, VARIAGATED COLOUR, UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH VARVING, SLOW SLAKING, NON STICKY.
117.90	0.09	100		100% MUDSTONE	CARBONACEOUS, SILTY, DARK BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
118.12	0.22	100		100% SILTSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.

DEPTh TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.39	0.27	100		50% SANDSTONE 30% SILTSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. LAMINAE, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., WITH DISTURBED BEDDING, NON SLAKING, NON STICKY.
118.53	0.14	100	T41	50% SANDSTONE 30% SILTSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. LAMINAE, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
118.64	0.11	100	T42	50% SANDSTONE 30% SILTSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. LAMINAE, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
118.75	0.11	100	T43	50% SANDSTONE 30% SILTSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. LAMINAE, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
118.80	0.05	100		50% SANDSTONE 30% SILTSTONE 20% CARBONACEOUS MUDSTONE	VERY FINE GRAINED, INTERCALATIONS, LIGHT GREY. FOSSILIFERROUS, INTERCALATIONS, GREY-BROWN. LAMINAE, STREAKS, DARK BROWN. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
118.89	0.09	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, WITH CARBONACEOUS WISPS, NON SLAKING, NON STICKY.
119.59	0.70	100		90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
119.70	0.11	100	T44	90% SANDSTONE,MEDIUM GRAINED 10% CARBONACEOUS MUDSTONE	LITHIC, GREY. STREAKS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
119.77	0.07	100	T44	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BASAL CONTACT ABRUPT, BEDS DIP 5 DEG., WITH CROSS LAMINATION, WITH PLANT REMAINS, NON SLAKING, NON STICKY.
119.93	0.16	100	T45	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.
120.06	0.13	100	T46	100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 5 DEG., NON SLAKING, NON STICKY.

TOP OF MT. NICHOLAS LOWER 1 : 352.59 M R.L.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
120.10	0.04	100	61	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
120.37	0.27	100	62	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
120.50	0.13	100	63	100% MUDSTONE	CARBONACEOUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
120.55	0.05	100	63	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
120.62	0.07	100	63	90% SILTSTONE 10% COAL, DULL	CARBONACEOUS, GREY-BROWN. LENSES, BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
120.69	0.07	100	64	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.10	0.41	100	65	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.17	0.07	100	65	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.29	0.12	100	66	90% CARBONACEOUS MUDSTONE 10% COAL, DULL	COALY, BROWN-BLACK. LENSES, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.36	0.07	100	67	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.40	0.04	100	67	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.46	0.06	100	67	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.49	0.03	100	68	100% MUDSTONE	CARBONACEOUS, LENSES, DARK BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.51	0.02	100	69	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.53	0.02	100	69	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.54	0.01	100	69	50% MUDSTONE 50% COAL, DULL	STREAKS, GREY-BROWN. BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.60	0.06	100	69	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
121.62	0.02	100	69	90% COAL, DULL 10% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.64	0.02	100	69	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.67	0.03	100	69	60% CARBONACEOUS MUDSTONE 40% CLAYSTONE	COALY, BROWN-BLACK. GREY-BROWN. UNWEATHERED, STIFF, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.71	0.04	100	69	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.76	0.05	100	69	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.70 M; SAMPLED THICKNESS= 1.70 M	
121.77	0.01	100	70	60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 40% MUDSTONE	BLACK. LENSES, STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.79	0.02	100	70	100% MUDSTONE	PELLETAL, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.84	0.05	100	70	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, BROWN-BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.86	0.02	100	70	60% TONSTEIN 40% COAL, DULL WITH FEW BRIGHT BANDS	WHITE. INTERCALATIONS, BLACK. UNWEATHERED, WEAK ROCK, THINLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.91	0.05	100	71	70% COAL, DULL 30% CARBONACEOUS MUDSTONE	BLACK. COALY, INTERCALATIONS, BROWN-BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.93	0.02	100	72	90% CLAYSTONE 10% COAL, DULL	TUFFACEOUS, LIGHT BROWN. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
121.98	0.05	100	73	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.01	0.03	100	73	100% SILTSTONE	CARBONACEOUS, LENSES, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.07	0.06	100	73	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.08	0.01	100	74	100% CLAYSTONE	TUFFACEOUS, WHITE, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.11	0.03	100	75	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.13	0.02	100	75	100% MUDSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.16	0.03	100	75	100% CARBONACEOUS MUDSTONE	SILTY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.18	0.02	100	76	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.37	0.19	100	76	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 70 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
122.50	0.13	100	76	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
122.53	0.03	100	76	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.54	0.01	100	77	100% MUDSTONE	ARGILLACEOUS, LIGHT BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.57	0.03	100	77	60% COAL, DULL 40% MUDSTONE	BLACK. LENSES, STREAKS, LIGHT BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
122.64	0.07	100		100% MUDSTONE	FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
122.97	0.33	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
123.03	0.06	100	T47	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
123.11	0.08	100	T48	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
123.26	0.15	100	T49	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
123.76	0.50	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
123.89	0.13	100		90% CARBONACEOUS MUDSTONE 10% COAL	BROWN-BLACK. STREAKS, BLACK. UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
123.99	0.10	100		90% SANDSTONE,FINE GRAINED 10% CARBONACEOUS MUDSTONE	CALCAREOUS, LENSES, LIGHT GREY. COALY, STREAKS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.04	0.05	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.34	0.30	100		100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, NON SLAKING, NON STICKY.
				TOP OF MT. NICHOLAS LOWER 2 : 348.31 M R.L.	
124.37	0.03	100	81	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.42	0.05	100	81	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.43	0.01	100	81	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.62	0.19	100	82	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.63	0.01	0	82	CORE LOSS	
124.67	0.04	100	82	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.70	0.03	100	82	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.86	0.16	100	82	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.87	0.01	100	82	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
124.90	0.03	100	83	100% MUDSTONE	PELLETAL, LIGHT BROWN, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.91	0.01	100	84	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, GREY-BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.23	0.32	100	84	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., MODERATELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, INFILLED WITH CALCITE, NON SLAKING, NON STICKY.
125.26	0.03	100	85	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.28	0.02	100	85	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.32	0.04	100	85	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.44	0.12	100	86	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.45	0.01	100	86	100% CARBONACEOUS MUDSTONE	COALY, BROWN-BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.51	0.06	100	86	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.52	0.01	100	86	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.53	0.01	100	86	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.56	0.03	100	87	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.63	0.07	100	88	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.73	0.10	100	88	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 1 DEG., CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES, NON SLAKING, NON STICKY.
125.76	0.03	100	88	95% COAL, DULL 5% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
125.90	0.14	100	89	70% COAL, DULL 30% CARBONACEOUS MUDSTONE	BLACK. BROWN-BLACK. UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.

BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.56 M; SAMPLED THICKNESS= 1.56 M

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
125.94	0.04	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, GREY-BROWN. LENSES, GREY. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 1 DEG., NON SLAKING, NON STICKY.
126.04	0.10	100	T50	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
126.16	0.12	100	T51	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
126.23	0.07	100	T52	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 1 DEG., WITH PLANT REMAINS, NON SLAKING, NON STICKY.
126.34	0.11	100	T53	100% SANDSTONE	MED.-FINE GRAINED, GREY, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., WITH NORMAL GRADED BEDDING, NON SLAKING, NON STICKY.
126.64	0.30	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.69	0.05	100		100% MUDSTONE	SILTY, FOSSILIFERROUS, GREY, UNWEATHERED, WEAK ROCK, VERY THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.80	0.11	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THINLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
126.94	0.14	100		100% SILTSTONE	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.33	0.39	100		100% SANDSTONE,FINE GRAINED	FOSSILIFERROUS, GREY-BROWN, UNWEATHERED, WEAK ROCK, MEDIUM BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
127.47	0.14	100		90% SILTSTONE 10% MUDSTONE	FOSSILIFERROUS, GREY-BROWN. CARBONACEOUS, INTERCALATIONS, DARK BROWN. UNWEATHERED, WEAK ROCK, THICKLY LAMINATED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
131.80	4.33	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.
132.43	0.63	100		100% SANDSTONE	MED.-COARSE GRAINED, LITHIC, GREY, UNWEATHERED, WEAK ROCK, THICKLY BEDDED, BEDS DIP 2 DEG., NON SLAKING, NON STICKY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	1.17 M	22.56 - 23.73 M	1.17 M
M2	0.00 M	49.28 - 50.04 M	0.76 M
M3	0.00 M	63.00 - 63.90 M	0.90 M
L1	1.70 M	120.06 - 121.76 M	1.70 M
L2	1.56 M	124.34 - 125.90 M	1.56 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T02	0.85 - 1.05 M	0.20 M
T03	1.05 - 1.25 M	0.20 M
T04	7.25 - 7.48 M	0.23 M
T05	7.85 - 8.03 M	0.18 M
T06	10.22 - 10.43 M	0.21 M
T07	10.43 - 10.59 M	0.16 M
T08	10.69 - 10.84 M	0.15 M
T09	10.84 - 11.02 M	0.18 M
T10	11.02 - 11.19 M	0.17 M
T11	11.21 - 11.38 M	0.17 M
T12	11.38 - 11.58 M	0.20 M
T13	17.88 - 18.04 M	0.16 M
T14	18.18 - 18.38 M	0.20 M
T14	18.43 - 18.69 M	0.26 M
T15	18.69 - 18.85 M	0.16 M
T16	18.85 - 19.05 M	0.20 M
T17	21.93 - 22.09 M	0.16 M
T18	22.09 - 22.27 M	0.18 M
T19	22.27 - 22.44 M	0.17 M
1	22.56 - 22.72 M	0.16 M
2	22.72 - 22.78 M	0.06 M
3	22.78 - 22.95 M	0.17 M
4	22.95 - 23.02 M	0.07 M
5	23.02 - 23.07 M	0.05 M
6	23.07 - 23.11 M	0.04 M
7	23.11 - 23.20 M	0.09 M
8	23.20 - 23.39 M	0.19 M
9	23.39 - 23.69 M	0.30 M
10	23.69 - 23.73 M	0.04 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T20	23.74 - 23.84 M	0.10 M
T21	24.40 - 24.60 M	0.20 M
T22	24.60 - 24.80 M	0.20 M
T23	42.65 - 42.79 M	0.14 M
T24	42.79 - 42.93 M	0.14 M
T25	42.93 - 43.08 M	0.15 M
T26	43.08 - 43.23 M	0.15 M
T27	43.23 - 43.36 M	0.13 M
T28	43.36 - 43.51 M	0.15 M
T29	43.51 - 43.66 M	0.15 M
T30	43.66 - 43.78 M	0.12 M
T31	43.78 - 43.94 M	0.16 M
T32	43.94 - 44.10 M	0.16 M
T33	44.10 - 44.26 M	0.16 M
T34	44.26 - 44.41 M	0.15 M
T35	44.41 - 44.58 M	0.17 M
T36	44.58 - 44.72 M	0.14 M
T37	44.72 - 44.87 M	0.15 M
T38	117.45 - 117.55 M	0.10 M
T39	117.55 - 117.67 M	0.12 M
T40	117.67 - 117.77 M	0.10 M
T41	118.39 - 118.53 M	0.14 M
T42	118.53 - 118.64 M	0.11 M
T43	118.64 - 118.75 M	0.11 M
T44	119.59 - 119.77 M	0.18 M
T45	119.77 - 119.93 M	0.16 M
T46	119.93 - 120.06 M	0.13 M
61	120.06 - 120.10 M	0.04 M
62	120.10 - 120.37 M	0.27 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
63	120.37 - 120.62 M	0.25 M
64	120.62 - 120.69 M	0.07 M
65	120.69 - 121.17 M	0.48 M
66	121.17 - 121.29 M	0.12 M
67	121.29 - 121.46 M	0.17 M
68	121.46 - 121.49 M	0.03 M
69	121.49 - 121.76 M	0.27 M
70	121.76 - 121.86 M	0.10 M
71	121.86 - 121.91 M	0.05 M
72	121.91 - 121.93 M	0.02 M
73	121.93 - 122.07 M	0.14 M
74	122.07 - 122.08 M	0.01 M
75	122.08 - 122.16 M	0.08 M
76	122.16 - 122.53 M	0.37 M
77	122.53 - 122.57 M	0.04 M
T47	122.97 - 123.03 M	0.06 M
T48	123.03 - 123.11 M	0.08 M
T49	123.11 - 123.26 M	0.15 M
81	124.34 - 124.43 M	0.09 M
82	124.43 - 124.87 M	0.44 M
83	124.87 - 124.90 M	0.03 M
84	124.90 - 125.23 M	0.33 M
85	125.23 - 125.32 M	0.09 M
86	125.32 - 125.53 M	0.21 M
87	125.53 - 125.56 M	0.03 M
88	125.56 - 125.76 M	0.20 M
89	125.76 - 125.90 M	0.14 M
T50	125.94 - 126.04 M	0.10 M
T51	126.04 - 126.16 M	0.12 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T52	126.16 - 126.23 M	0.07 M
T53	126.23 - 126.34 M	0.11 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 173

HOLE TYPE	SHAFT
EASTING	590,706 M AM GRID
NORTHING	5,398,253 M AM GRID
ELEVATION	357.91 M
TOTAL DEPTH DRILLED	10.86 M
DRILLING STARTED	24/06/82
DRILLING TIME	2 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	10.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	10.03 M
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.10	0.10	100		100% SOIL	ARENACEOUS, LIGHT BROWN, WEATHERED TO SOIL, FIRM.
3.40	3.30	100		100% SANDSTONE,MEDIUM GRAINED	SOIL, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 1 : 354.51 M R.L.	
3.60	0.20	100		90% CARBONACEOUS SHALE 10% MUDSTONE	COALY, BLACK. BANDS, LIGHT BROWN. MODERATELY WEATHERED, STIFF.
6.00	2.40	100		90% COAL 10% MUDSTONE	BLACK. BANDS, LIGHT BROWN. MODERATELY WEATHERED, VERY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.60 M; SAMPLED THICKNESS= 0.00 M	
9.32	3.32	100		90% MUDSTONE 10% SILTSTONE	GREY-BROWN. STREAKS, LENSES, GREY. MODERATELY WEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., STRIKE 180DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
9.42	0.10	100	11	90% MUDSTONE 10% SILTSTONE	GREY-BROWN. STREAKS, LENSES, GREY. MODERATELY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 348.49 M R.L.	
9.52	0.10		1	100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, VERY WIDELY SPACED JOINTS, JOINTS DIP 90 DEG., STRIKE 160DEG., OPEN, PLANAR, SMOOTH DISCONTINUITIES.
9.98	0.46	100	2	80% COAL, DULL 20% COAL, MID LUSTROUS - DULL	BLACK. BLACK. MODERATELY WEATHERED, VERY WEAK ROCK.
10.03	0.05	100	3	100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., STRIKE 330DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
10.22	0.19	100	4	100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., STRIKE 230DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
10.23	0.01	100	5	100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.25	0.02	100	6	100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., STRIKE 050DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
10.28	0.03	100	7	100% MUDSTONE	GREY, VERY WEAK ROCK.
				BASE OF WEATHERING	
10.41	0.13	100	8	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., STRIKE 040DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
10.45	0.04	100	9	100% MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG., STRIKE 085DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
10.76	0.31	100	10	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 85 DEG., STRIKE 210DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.34 M; SAMPLED THICKNESS= 1.34 M	
10.86	0.10	100	12	100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	3.40 - 6.00 M	2.60 M
L2	1.34 M	9.42 - 10.76 M	1.34 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
11	9.32 - 9.42 M	0.10 M
1	9.42 - 9.52 M	0.10 M
2	9.52 - 9.98 M	0.46 M
3	9.98 - 10.03 M	0.05 M
4	10.03 - 10.22 M	0.19 M
5	10.22 - 10.23 M	0.01 M
6	10.23 - 10.25 M	0.02 M
7	10.25 - 10.28 M	0.03 M
8	10.28 - 10.41 M	0.13 M
9	10.41 - 10.45 M	0.04 M
10	10.45 - 10.76 M	0.31 M
12	10.76 - 10.86 M	0.10 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 173R1

HOLE TYPE	SHAFT
EASTING	590,706 M AM GRID
NORTHING	5,398,253 M AM GRID
ELEVATION	357.91 M
TOTAL DEPTH DRILLED	10.86 M
DRILLING STARTED	24/06/82
DRILLING TIME	2 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	10.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	10.03 M
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.10	0.10	100		100% SOIL	ARENACEOUS, LIGHT BROWN, WEATHERED TO SOIL, FIRM.
3.40	3.30	100		100% SANDSTONE,MEDIUM GRAINED	SOIL, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 1 : 354.51 M R.L.	
6.00	2.60	100		90% COAL 10% MUDSTONE	BLACK. BANDS, LIGHT BROWN. MODERATELY WEATHERED, VERY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.60 M; SAMPLED THICKNESS= 0.00 M	
9.42	3.42	100		90% MUDSTONE 10% SILTSTONE	GREY-BROWN. STREAKS, LENSES, GREY. MODERATELY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 348.49 M R.L.	
9.52	0.10	100		100% COAL, DULL	BLACK, MODERATELY WEATHERED, WEAK ROCK.
9.98	0.46	100		80% COAL, DULL 20% COAL, MID LUSTROUS - DULL	BLACK. BLACK. MODERATELY WEATHERED, VERY WEAK ROCK.
10.03	0.05	100	1	100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.22	0.19	100	1	100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.23	0.01	100	1	100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.25	0.02	100	1	100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.28	0.03	100	1	100% MUDSTONE	GREY, VERY WEAK ROCK.
				BASE OF WEATHERING	
10.41	0.13	100	1	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
10.45	0.04	100	1	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
10.76	0.31	100	1	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.34 M; SAMPLED THICKNESS= 0.78 M	
10.86	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	3.40 - 6.00 M	2.60 M
L2	0.78 M	9.42 - 10.76 M	1.34 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	9.98 - 10.76 M	0.78 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 173R2

HOLE TYPE	SHAFT
EASTING	590,706 M AM GRID
NORTHING	5,398,253 M AM GRID
ELEVATION	357.91 M
TOTAL DEPTH DRILLED	10.86 M
DRILLING STARTED	24/06/82
DRILLING TIME	2 DAYS
CORE SIZE	
HOLE SIZE	
LENGTH CASED	
INITIAL WATER LEVEL	10.00 M
WATER LEVEL AT GEOPHYSICAL LOGGING	10.03 M
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

*** FRAME E13***

BOREHOLE : GY 173R2

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
0.10	0.10	100		100% SOIL	ARENACEOUS, LIGHT BROWN, WEATHERED TO SOIL, FIRM.
3.40	3.30	100		100% SANDSTONE,MEDIUM GRAINED	SOIL, LIGHT BROWN, HIGHLY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 1 : 354.51 M R.L.	
6.00	2.60	100		90% COAL 10% MUDSTONE	BLACK. BANDS, LIGHT BROWN. MODERATELY WEATHERED, VERY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.60 M; SAMPLED THICKNESS= 0.00 M	
9.42	3.42	100		90% MUDSTONE 10% SILTSTONE	GREY-BROWN. STREAKS, LENSES, GREY. MODERATELY WEATHERED, VERY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 348.49 M R.L.	
9.52	0.10	100		100% COAL, DULL	BLACK, MODERATELY WEATHERED, VERY WEAK ROCK.
9.98	0.46	100		80% COAL, DULL 20% COAL, MID LUSTROUS - DULL	BLACK. BLACK. MODERATELY WEATHERED, VERY WEAK ROCK.
10.03	0.05	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.22	0.19	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.23	0.01	100		100% MUDSTONE	GREY, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.25	0.02	100		100% COAL, DULL	BLACK, SLIGHTLY WEATHERED, VERY WEAK ROCK.
10.28	0.03	100		100% MUDSTONE	GREY, VERY WEAK ROCK.
				BASE OF WEATHERING	
10.41	0.13	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
10.45	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
10.61	0.16	100		100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
10.76	0.15	100	13	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.34 M; SAMPLED THICKNESS= 0.15 M	
10.86	0.10	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	0.00 M	3.40 - 6.00 M	2.60 M
L2	0.15 M	9.42 - 10.76 M	1.34 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
13	10.61 - 10.76 M	0.15 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 174AL

HOLE TYPE	CORE
EASTING	591,864 M AM GRID
NORTHING	5,398,612 M AM GRID
ELEVATION	463.04 M
TOTAL DEPTH DRILLED	133.12 M
DRILLING STARTED	20/09/82
DRILLING TIME	15 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	11.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.00	11.00			100% DOLERITE	SCREE.
30.00	19.00			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
30.53	0.53			99% SANDSTONE,MEDIUM GRAINED 1% COAL	LIGHT GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
30.99	0.46			70% SANDSTONE,MEDIUM GRAINED 30% COAL	LIGHT GREY. STREAKS, FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SEPARATION ALONG SOME BEDDING SURFACES, BEDS DIP 20 DEG., WITH MUD PELLETS, WITH CARBONACEOUS WISPS.
31.17	0.18			85% SANDSTONE,MEDIUM GRAINED 10% COAL 5% MUDSTONE	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
31.23	0.06			80% MUDSTONE 20% SANDSTONE,MEDIUM GRAINED	FRAGMENTS, PELLETAL, GREY. LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
32.06	0.83			100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
32.36	0.30	100	T1	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY.
32.42	0.06	100	T2	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY.
32.63	0.21	100	T3	90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BROWN-BLACK.
32.96	0.33			90% SANDSTONE 10% CARBONACEOUS MUDSTONE	MED.-FINE GRAINED, LIGHT GREY. LAMINAE, STREAKS, BROWN-BLACK.
33.02	0.06			95% SANDSTONE 5% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
33.06	0.04			100% CARBONACEOUS MUDSTONE	LENSES, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
33.18	0.12			75% SANDSTONE,MEDIUM GRAINED 15% CARBONACEOUS MUDSTONE 10% COAL	LIGHT GREY. LENSES, FRAGMENTS, BROWN. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
33.63	0.45			80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 429.41 M R.L.	
33.69	0.06		A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
33.74	0.05		A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
33.76	0.02		A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
33.92	0.16		A1	100% COAL, DULL	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
33.93	0.01		A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.04	0.11		A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.20	0.16		A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.29	0.09		A2	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, SLOW SLAKING.
34.37	0.08		A2	100% CLAYSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING.
34.48	0.11		A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
34.50	0.02		A3	100% CLAYSTONE	CREAM, UNWEATHERED, VERY WEAK ROCK.
34.58	0.08		A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.75	0.17		A3	70% COAL, DULL WITH FEW BRIGHT BANDS 30% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
34.98	0.23		A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.05	0.07		A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.24	0.19		A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.28	0.04		A3	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.33	0.05		A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.34	0.01		A3	100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.40	0.06		A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 1.77 M; SAMPLED THICKNESS= 1.77 M

35.65	0.25	100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK.
36.39	0.74	100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK.
37.80	1.41	100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

*** CHIP DESCRIPTION ***

60.00	22.20	100% SEDIMENTARY ROCK	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
120.50	60.50			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
120.54	0.04			70% MUDSTONE 30% MUDSTONE	CARBONACEOUS, DARK GREY. GREY. UNWEATHERED, MODERATELY WEAK ROCK.
120.71	0.17			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.44	0.73			85% MUDSTONE 15% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
121.73	0.29			80% COAL, DULL 15% COAL, DULL WITH FEW BRIGHT BANDS 5% CARBONACEOUS MUDSTONE	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
122.01	0.28			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
123.60	1.59	90		70% SANDSTONE,FINE GRAINED 28% SILTSTONE 2% MUDSTONE	LIGHT GREY. BANDS, LENSES, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
124.03	0.43			65% SILTSTONE 20% SANDSTONE,FINE GRAINED 15% MUDSTONE	GREY. BANDS, LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
124.64	0.61			100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.77	0.13			90% MUDSTONE 10% MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
125.08	0.31			100% MUDSTONE	MASSIVE, SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
125.34	0.26			75% SANDSTONE,FINE GRAINED 25% SILTSTONE	LIGHT GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
125.67	0.33			100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
125.80	0.13			100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
		TOP OF MT. NICHOLAS LOWER 1 : 337.24 M R.L.			
125.82	0.02		A4	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.00	0.18		A4	75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.00	1.00	0	A4	CORE LOSS	
127.32	0.32		A4	70% COAL, DULL WITH FEW BRIGHT BANDS 30% COAL, DULL	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.34	0.02		A4	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.42	0.08		A4	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.43	0.01		A4	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
127.55	0.12		A4	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.61	0.06		A4	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.64	0.03		A4	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.84	0.20		A4	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.95	0.11		A4	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.15 M; SAMPLED THICKNESS= 2.15 M			
128.00	0.05		T11	100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.50	0.50		T11	90% SILTSTONE 10% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
128.56	0.06			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.57	0.01			100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.82	0.25			100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.20	0.38			75% SILTSTONE 25% MUDSTONE	GREY. SILTY, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
130.20	1.00	0		CORE LOSS	
130.90	0.70			100% SILTSTONE	CARBONACEOUS, BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
131.05	0.15			90% MUDSTONE 10% MUDSTONE	BADLY BROKEN, GREY. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
		TOP OF MT. NICHOLAS LOWER 2 : 331.99 M R.L.			
131.09	0.04	100	A5	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.20	0.11	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.26	0.06	100	A5	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
131.38	0.12	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.39	0.01	100	A5	100% CLAYSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
131.46	0.07	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.49	0.03	100	A5	50% COAL, DULL 40% CLAYSTONE 10% TONSTEIN	BLACK. TUFFACEOUS, CREAM. WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
131.60	0.11	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.80	0.20	100	A5	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.84	0.04	100	A5	90% CARBONACEOUS MUDSTONE 10% MUDSTONE	COALY, BLACK. PELLETAL, LIGHT BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
131.85	0.01	100	A5	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
131.91	0.06	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.92	0.01	100	A5	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
132.05	0.13	100	A5	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
132.06	0.01	100	A5	100% COAL, MID LUSTROUS - DULL	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
132.42	0.36	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
132.50	0.08	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
132.63	0.13	100	A5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
132.80	0.17	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
133.02	0.22	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.97 M; SAMPLED THICKNESS= 1.97 M	
133.12	0.10			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	1.77 M	33.63 - 35.40 M	1.77 M
L1	2.15 M	125.80 - 127.95 M	2.15 M
L2	1.97 M	131.05 - 133.02 M	1.97 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	32.06 - 32.36 M	0.30 M
T2	32.36 - 32.42 M	0.06 M
T3	32.42 - 32.63 M	0.21 M
A1	33.63 - 34.20 M	0.57 M
A2	34.20 - 34.37 M	0.17 M
A3	34.37 - 35.40 M	1.03 M
A4	125.80 - 127.95 M	2.15 M
T11	127.95 - 128.50 M	0.55 M
A5	131.05 - 133.02 M	1.97 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 174BL

HOLE TYPE	CORE
EASTING	591,864 M AM GRID
NORTHING	5,398,605 M AM GRID
ELEVATION	463.04 M
TOTAL DEPTH DRILLED	131.99 M
DRILLING STARTED	05/10/82
DRILLING TIME	17 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	12.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
8.50	8.50			100% DOLERITE	SCREE.
32.50	24.00			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
33.11	0.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK.
33.30	0.19	100	T1	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK.
33.63	0.33	100	T2	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK.
33.80	0.17	100		55% SANDSTONE,MEDIUM GRAINED 45% COAL	FRAGMENTS, BADLY BROKEN, LIGHT GREY. FRAGMENTS, BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 429.24 M R.L.	
33.90	0.10	100	A1	100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING.
34.03	0.13	100	A1	90% COAL, DULL 10% CARBONACEOUS MUDSTONE	BLACK. COALY, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
34.18	0.15	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.22	0.04	100	A1	100% CLAYSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.
34.30	0.08	100	A1	100% CARBONACEOUS MUDSTONE	GRADING TO, HEAVY DULL COAL, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
34.87	0.57	100	A1	70% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BADLY BROKEN, BLACK. BANDS, BADLY BROKEN, BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
34.90	0.03	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, RAPID SLAKING.
35.03	0.13	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.06	0.03	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.10	0.04	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH PYRITE ON JOINTS, UNWEATHERED, MODERATELY WEAK ROCK.
35.50	0.40	100	A1	69% COAL, DULL WITH FEW BRIGHT BANDS 30% COAL, DULL 1% MUDSTONE	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
35.51	0.01	100	A1	55% COAL, DULL WITH FEW BRIGHT BANDS 45% MUDSTONE	BLACK. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
35.55	0.04	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
35.56	0.01	100	A1	55% COAL, DULL 45% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
35.70	0.14	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.77	0.07	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
35.80	0.03	100	A1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, VERY WEAK ROCK.
35.91	0.11	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
	BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 2.11 M; SAMPLED THICKNESS= 2.11 M				
36.09	0.18	100	T3	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
				*** CHIP DESCRIPTION ***	
122.00	85.91			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
122.70	0.70	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
123.02	0.32	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.46	0.44	75		100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.60	0.14	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.28	0.68	100		75% SANDSTONE,FINE GRAINED 20% SILTSTONE 5% SANDSTONE,MEDIUM GRAINED	LIGHT GREY. BANDS, LENSES, GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
124.64	0.36	100		80% SANDSTONE,MEDIUM GRAINED 15% SILTSTONE 5% COAL	LIGHT GREY. LAMINAE, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.82	0.18	100	T11	81% SILTSTONE 10% CALCITE 9% MUDSTONE	GREY. LENSES, WHITE. LAMINAE, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
124.84	0.02	100	T11	100% CLAYSTONE	BANDS, GREY, UNWEATHERED, VERY WEAK ROCK, RAPID SLAKING.
124.91	0.07	100	T11	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
	TOP OF MT. NICHOLAS LOWER 1 : 338.13 M R.L.				

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.95	0.04	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.16	0.21	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BAKED, UNWEATHERED, MODERATELY WEAK ROCK.
125.21	0.05	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.22	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.24	0.02	100	A2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.25	0.01	100	A2	60% COAL, MID LUSTROUS 40% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.38	0.13	100	A2	90% COAL, MID LUSTROUS - DULL 10% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.39	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.42	0.03	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.50	0.08	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.68	0.18	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.75	0.07	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.78	0.03	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.30	0.52	100	A2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.31	0.01	100	A2	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
126.44	0.13	100	A2	55% COAL, DULL 45% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
126.47	0.03	100	A2	85% TONSTEIN 15% COAL, DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
126.53	0.06	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.55	0.02	100	A2	95% CLAYSTONE 5% COAL, DULL	TUFFACEOUS, WHITE. LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
126.59	0.04	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.60	0.01	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.62	0.02	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.66	0.04	100	A2	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.98	0.32	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.00	0.02	100	A2	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.05	0.05	100	A2	100% COAL, HEAVY DULL	CHERTY, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.14 M; SAMPLED THICKNESS= 2.14 M	
127.10	0.05	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.33	0.23	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.52	0.19	100	T12	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.85	0.33	100		95% MUDSTONE 5% COAL	SILTY, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
128.14	0.29	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
128.94	0.80	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.04	0.10	100		100% CARBONACEOUS MUDSTONE	BRIGHT COAL, LENSES, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
129.30	0.26	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.60	0.30	100		100% SILTSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
129.75	0.15			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
130.06	0.31		T13	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
130.16	0.10	100	T13	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 332.88 M R.L.	
130.59	0.43	100	A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
130.60	0.01	100	A3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
130.65	0.05	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
130.66	0.01	100	A3	100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK.
130.69	0.03	100	A3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
130.84	0.15	100	A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
130.96	0.12	100	A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
130.97	0.01	100	A3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
131.03	0.06	100	A3	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
131.18	0.15	100	A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.43	0.25	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.60	0.17	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
131.93	0.33	0		CORE LOSS	
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.77 M; SAMPLED THICKNESS= 1.44 M	
131.99	0.06	100	T14	100% SANDSTONE,FINE GRAINED	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	2.11 M	33.80 - 35.91 M	2.11 M
L1	2.14 M	124.91 - 127.05 M	2.14 M
L2	1.44 M	130.16 - 131.93 M	1.77 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	33.11 - 33.30 M	0.19 M
T2	33.30 - 33.63 M	0.33 M
A1	33.80 - 35.91 M	2.11 M
T3	35.91 - 36.09 M	0.18 M
T11	124.64 - 124.91 M	0.27 M
A2	124.91 - 127.05 M	2.14 M
T12	127.33 - 127.52 M	0.19 M
T13	129.75 - 130.16 M	0.41 M
A3	130.16 - 131.60 M	1.44 M
T14	131.93 - 131.99 M	0.06 M

THE SHELL COMPANY OI AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 175AL

HOLE TYPE	CORE
EASTING	590,400 M AM GRID
NORTHING	5,398,693 M AM GRID
ELEVATION	466.70 M
TOTAL DEPTH DRILLED	123.30 M
DRILLING STARTED	18/10/82
DRILLING TIME	7 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	6.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
3.00	3.00			100% DOLERITE	SCREE.
113.20	110.20			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
114.65	1.45	80		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
114.86	0.21	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, DARK GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
115.23	0.37	100		60% SANDSTONE,FINE GRAINED 40% CARBONACEOUS MUDSTONE	LIGHT GREY. LAMINAE, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
115.51	0.28	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.00	0.49	100		85% SANDSTONE,FINE GRAINED 15% CARBONACEOUS MUDSTONE	LIGHT GREY. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.18	0.18	100		70% SANDSTONE,FINE GRAINED 30% MUDSTONE	CARBONACEOUS, DARK GREY. BANDS, CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.76	0.58	100		90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. BANDS, COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.02	0.26	100	T1	90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. BANDS, COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 1 : 349.68 M R.L.	
117.12	0.10	0	A1	CORE LOSS	
117.20	0.08	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.22	0.02	100	A1	100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
117.25	0.03	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.29	0.04	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.32	0.03	100	A1	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.35	0.03	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.37	0.02	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
117.38	0.01	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.39	0.01	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
117.51	0.12	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.52	0.01	100	A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.73	0.21	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.74	0.01	100	A1	60% COAL, DULL 40% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.00	0.26	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.03	0.03	100	A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.08	0.05	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.21	0.13	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.22	0.01	100	A1	60% COAL, BRIGHT 40% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.28	0.06	100	A1	100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
118.32	0.04	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.39	0.07	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.47	0.08	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.55	0.08	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.59	0.04	100	A1	100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
118.60	0.01	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.61	0.01	100	A1	55% COAL, HEAVY DULL 45% TONSTEIN	BLACK. WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
118.64	0.03	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
118.68	0.04	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.70	0.02	100	A1	55% COAL, HEAVY DULL 45% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
118.77	0.07	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.78	0.01	100	A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.81	0.03	100	A1	100% MUDSTONE	BRIGHT COAL, STREAKS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
118.87	0.06	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.89	0.02	100	A1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.91	0.02	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.92	0.01	100	A1	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.95	0.03	100	A1	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.96	0.01	100	A1	100% MUDSTONE	BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
119.00	0.04	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.05	0.05	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.10	0.05	100	A1	75% COAL, DULL WITH FEW BRIGHT BANDS 25% COAL, DULL	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
119.15	0.05	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.17	0.02	100	A1	100% MUDSTONE	BANDS, BADLY BROKEN, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
119.30	0.13	100	A1	70% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL 10% COAL, BRIGHT	BADLY BROKEN, BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.28 M; SAMPLED THICKNESS= 2.28 M	
119.32	0.02	100	T2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.69	0.37	100	T2	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
119.70	0.01	100	T2	100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.75	0.05	100	T2	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.15	0.40	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.22	0.07	100		100% MUDSTONE	COALY, STREAKS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.33	0.11	0		CORE LOSS	
120.35	0.02	100	T3	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.57	0.22	100	T3	100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.74	0.17	100	T3	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.76	0.02	100	T3	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 345.94 M R.L.	
120.97	0.21	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.98	0.01	0	A2	CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.15	0.17	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.16	0.01	0	A2	CORE LOSS	
121.31	0.15	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.34	0.03	100	A2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.35	0.01	100	A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.77	0.42	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.79	0.02	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.84	0.05	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
121.95	0.11	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
121.99	0.04	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.01	0.02	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.03	0.02	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.15	0.12	100	A2	60% COAL, DULL WITH FEW BRIGHT BANDS 30% COAL, DULL 10% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
122.40	0.25	0	A2	CORE LOSS	
122.46	0.06	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.57	0.11	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.81 M; SAMPLED THICKNESS= 1.81 M	
122.60	0.03	100	T4	100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
122.95	0.35	100	T4	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
123.13	0.18	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
123.30	0.17	0		CORE LOSS	

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	2.28 M	117.02 - 119.30 M	2.28 M
L2	1.81 M	120.76 - 122.57 M	1.81 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	116.76 - 117.02 M	0.26 M
A1	117.02 - 119.30 M	2.28 M
T2	119.30 - 119.75 M	0.45 M
T3	120.33 - 120.76 M	0.43 M
A2	120.76 - 122.57 M	1.81 M
T4	122.57 - 122.95 M	0.38 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 175BL

HOLE TYPE	CORE
EASTING	590,414 M AM GRID
NORTHING	5,398,686 M AM GRID
ELEVATION	466.70 M
TOTAL DEPTH DRILLED	122.66 M
DRILLING STARTED	20/10/82
DRILLING TIME	10 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	6.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
4.50	4.50			100% DOLERITE	SCREE.
113.60	109.10			100% SEDIMENTARY ROCK	MODERATELY WEAK ROCK.
				*** CORE DESCRIPTION ***	
114.41	0.81	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.21	0.80	0		CORE LOSS	
115.24	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
115.36	0.12	100		98% SANDSTONE,FINE GRAINED 2% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
115.77	0.41	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	DARK GREY. LAMINAE, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
115.95	0.18	100		80% SANDSTONE,FINE GRAINED 20% CARBONACEOUS MUDSTONE	COALY, STREAKS, LIGHT GREY. LAMINAE, BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
116.56	0.61	100		95% CARBONACEOUS MUDSTONE 5% SANDSTONE,FINE GRAINED	BLACK. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
116.71	0.15	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.76	0.05	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
116.77	0.01	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
116.80	0.03	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.00	0.20	100		95% SANDSTONE,FINE GRAINED 5% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.17	0.17	100		75% CARBONACEOUS MUDSTONE 15% SANDSTONE,FINE GRAINED 10% COAL	BLACK. BANDS, LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.34	0.17	100	T1	90% SANDSTONE,FINE GRAINED 10% COAL	LIGHT GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT EROSIONAL.
				TOP OF MT. NICHOLAS LOWER 1 : 349.36 M R.L.	
117.37	0.03	100	A1	80% COAL, BRIGHT WITH FEW DULL BANDS 20% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.44	0.07	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
117.51	0.07	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.71	0.20	0	A1	CORE LOSS	
117.77	0.06	100	A1	70% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
117.79	0.02	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
117.89	0.10	0	A1	CORE LOSS	
117.93	0.04	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.94	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
117.96	0.02	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
117.97	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
118.07	0.10	0	A1	CORE LOSS	
118.23	0.16	100	A1	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.24	0.01	100	A1	100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
118.34	0.10	0	A1	CORE LOSS	
118.43	0.09	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.46	0.03	100	A1	70% CARBONACEOUS MUDSTONE 20% COAL, HEAVY DULL 10% COAL, DULL	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.56	0.10	0	A1	CORE LOSS	
118.59	0.03	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.60	0.01	100	A1	60% TONSTEIN 40% COAL, DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.61	0.01	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.62	0.01	100	A1	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
118.65	0.03	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.75	0.10	0	A1	CORE LOSS	
118.76	0.01	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
118.78	0.02	100	A1	100% MUDSTONE	BANDS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
118.81	0.03	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.88	0.07	100	A1	80% MUDSTONE 20% CARBONACEOUS MUDSTONE	BANDS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
118.90	0.02	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
118.94	0.04	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.01	0.07	0	A1	CORE LOSS	
119.44	0.43	100	A1	100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 2.10 M; SAMPLED THICKNESS= 2.10 M	
119.74	0.30	100	T2	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.23	0.49	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
120.65	0.42	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
121.00	0.35	100		100% MUDSTONE	SILTSTONE, BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.17	0.17	100		75% MUDSTONE 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, GREY. BADLY BROKEN, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 345.53 M R.L.	
121.74	0.57	100	A2	75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
121.76	0.02	100	A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
121.98	0.22	100	A2	100% COAL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.00	0.02	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.03	0.03	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.06	0.03	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.13	0.07	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.16	0.03	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
122.24	0.08	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.32	0.08	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.41	0.09	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.43	0.02	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.54	0.11	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.55	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
122.59	0.04	100	A2	60% CARBONACEOUS MUDSTONE 40% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
122.62	0.03	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.45 M; SAMPLED THICKNESS= 1.45 M	
122.66	0.04	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	2.10 M	117.34 - 119.44 M	2.10 M
L2	1.45 M	121.17 - 122.62 M	1.45 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	117.17 - 117.34 M	0.17 M
A1	117.34 - 119.44 M	2.10 M
T2	119.44 - 119.74 M	0.30 M
A2	121.17 - 122.62 M	1.45 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 176AL

HOLE TYPE	
EASTING	590,313 M AM GRID
NORTHING	5,401,344 M AM GRID
ELEVATION	486.23 M
TOTAL DEPTH DRILLED	108.00 M
DRILLING STARTED	29/10/82
DRILLING TIME	
CORE SIZE	100.0 MM
HOLE SIZE	190.0 MM
LENGTH CASED	9.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.50	11.50			100% DOLERITE	SCREE.
23.30	11.80			100% SEDIMENTARY ROCK	MODERATELY WEAK ROCK.
				*** CORE DESCRIPTION ***	
24.39	1.09	100		55% SANDSTONE,FINE GRAINED 25% CARBONACEOUS MUDSTONE 20% SILTSTONE	LIGHT GREY. LAMINAE, BLACK. LAMINAE, BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.
24.72	0.33	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
24.84	0.12	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.10	0.26	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.20	0.10	100		100% MUDSTONE	SILTY, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.30	0.10	0		CORE LOSS	
25.40	0.10	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.45	0.05	0		CORE LOSS	
25.75	0.30	100		75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
25.76	0.01	100		100% CARBONACEOUS MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
25.86	0.10	100		100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.30	0.44	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.41	0.11	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
26.78	0.37	100	T1	100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.86	0.08	100	T1	75% MUDSTONE 25% MUDSTONE	BADLY BROKEN, GREY. CARBONACEOUS, BADLY BROKEN, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 459.37 M R.L.	
26.92	0.06	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.93	0.01	100	A1	55% COAL, BRIGHT 45% COAL, DULL	BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
26.94	0.01	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.96	0.02	100	A1	100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
26.98	0.02	100	A1	90% TONSTEIN 10% COAL, HEAVY DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.36	0.38	100	A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.51	0.15	100	A1	100% COAL, DULL	BADLY BROKEN, FAULT GOUGE, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.60	0.09	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.69	0.09	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.73	0.04	0	A1	CORE LOSS	
27.75	0.02	100	A1	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.76	0.01	100	A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
28.05	0.29	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.19 M; SAMPLED THICKNESS= 1.19 M	
28.10	0.05	100	T2	100% CARBONACEOUS MUDSTONE	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
28.38	0.28	100	T2	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
28.56	0.18	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.30	0.74	100		65% SANDSTONE,FINE GRAINED 30% SILTSTONE 5% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. BANDS, LENSES, GREY. LAMINAE, STREAKS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
102.00	72.70			100% SEDIMENTARY ROCK	UNWEATHERED, MODERATELY WEAK ROCK.
				*** CORE DESCRIPTION ***	
102.70	0.70	20		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.31	2.61	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
105.69	0.38	100	T3	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF MT. NICHOLAS LOWER 2 : 380.54 M R.L.			
105.76	0.07	100	A2	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.87	0.11	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
105.91	0.04	100	A2	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
106.37	0.46	100	A2	70% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
106.52	0.15	0	A2	CORE LOSS	
106.53	0.01	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.58	0.05	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.66	0.08	100	A2	75% COAL, DULL 20% CARBONACEOUS MUDSTONE 5% MUDSTONE	BLACK. BLACK. LAMINAE, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
106.68	0.02	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.72	0.04	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.73	0.01	100	A2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.88	0.15	0		CORE LOSS	
106.90	0.02	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
		BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.21 M; SAMPLED THICKNESS= 1.06 M			
106.93	0.03	100	T4	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.41	0.48	100	T4	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.00	0.59	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	1.19 M	26.86 - 28.05 M	1.19 M
L2	1.06 M	105.69 - 106.90 M	1.21 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	26.41 - 26.86 M	0.45 M
A1	26.86 - 28.05 M	1.19 M
T2	28.05 - 28.38 M	0.33 M
T3	105.31 - 105.69 M	0.38 M
A2	105.69 - 106.73 M	1.04 M
A2	106.88 - 106.90 M	0.02 M
T4	106.90 - 107.41 M	0.51 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 176BL

HOLE TYPE	CORE
EASTING	590,319 M AM GRID
NORTHING	5,401,334 M AM GRID
ELEVATION	486.23 M
TOTAL DEPTH DRILLED	108.95 M
DRILLING STARTED	03/11/82
DRILLING TIME	7 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	170.0 MM
LENGTH CASED	14.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	GEOTECHNICAL DATA SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.50	13.50			100% DOLERITE	SCREE.
23.50	10.00			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
23.82	0.32	100		100% SANDSTONE,MEDIUM GRAINED	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
23.99	0.17	100		60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LIGHT GREY. BANDS, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
24.50	0.51	80		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
24.61	0.11	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
24.83	0.22	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.40	0.57	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.70	0.30	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK.
25.73	0.03	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
25.92	0.19	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
26.50	0.58	100		65% COAL, DULL 20% COAL, DULL WITH FEW BRIGHT BANDS 15% CARBONACEOUS MUDSTONE	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
26.81	0.31	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
26.93	0.12	100		55% MUDSTONE 45% CARBONACEOUS MUDSTONE	GREY. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
27.29	0.36	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.63	0.34	100	T1	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 458.60 M R.L.	
27.69	0.06	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.70	0.01	100	A1	100% CARBONACEOUS MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.71	0.01	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.72	0.01	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.74	0.02	100	A1	100% CARBONACEOUS MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
27.77	0.03	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.80	0.03	100	A1	75% COAL, HEAVY DULL 25% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
27.85	0.05	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
27.86	0.01	100	A1	90% CARBONACEOUS MUDSTONE 10% TONSTEIN	GREY. UNWEATHERED, MODERATELY WEAK ROCK.
28.30	0.44	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
28.32	0.02	100	A1	100% MUDSTONE	BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
28.78	0.46	100	A1	65% COAL, DULL WITH FEW BRIGHT BANDS 35% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
28.79	0.01	100	A1	100% MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
28.97	0.18	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.04	0.07	100	A1	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 1.41 M; SAMPLED THICKNESS= 1.41 M	
29.11	0.07	100	T2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK.
29.41	0.30	100	T2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
29.50	0.09			100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
102.60	73.10			100% SEDIMENTARY ROCK	UNWEATHERED.
				*** CORE DESCRIPTION ***	
102.87	0.27	100		90% SILTSTONE 10% SANDSTONE,MEDIUM GRAINED	GREY. LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
106.45	3.58	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
106.84	0.39	100	T3	100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 379.39 M R.L.	
106.89	0.05	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
106.90	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
107.00	0.10	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.03	0.03	100	A2	100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
107.06	0.03	100	A2	100% CLAYSTONE	CARBONACEOUS, BLACK, UNWEATHERED, VERY WEAK ROCK.
107.12	0.06	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.13	0.01	100	A2	55% COAL, BRIGHT 45% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
107.32	0.19	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.44	0.12	100	A2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.54	0.10	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.55	0.01	100	A2	55% COAL, BRIGHT 45% COAL, DULL	LENSES, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
107.74	0.19	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.76	0.02	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.82	0.06	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
107.87	0.05	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
107.88	0.01	100	A2	100% CLAYSTONE	LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
107.99	0.11	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.00	0.01	100	A2	55% COAL, BRIGHT 45% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
108.05	0.05	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.07	0.02	100	A2	100% TONSTEIN	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.12	0.05	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.17	0.05	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
108.25	0.08	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.41 M; SAMPLED THICKNESS= 1.41 M	
108.27	0.02	100	T4	100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK.
108.34	0.07	100	T4	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.60	0.26	100	T4	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.64	0.04	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
108.95	0.31	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	1.41 M	27.63 - 29.04 M	1.41 M
L2	1.41 M	106.84 - 108.25 M	1.41 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	27.29 - 27.63 M	0.34 M
A1	27.63 - 29.04 M	1.41 M
T2	29.04 - 29.41 M	0.37 M
T3	106.45 - 106.84 M	0.39 M
A2	106.84 - 108.25 M	1.41 M
T4	108.25 - 108.60 M	0.35 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 177AL

HOLE TYPE	CORE
EASTING	591,220 M AM GRID
NORTHING	5,402,290 M AM GRID
ELEVATION	480.51 M
TOTAL DEPTH DRILLED	104.84 M
DRILLING STARTED	13/12/82
DRILLING TIME	5 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	200.0 MM
LENGTH CASED	19.50 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
20.00	20.00			100% DOLERITE	SCREE.
26.50	6.50			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
26.70	0.20	0		CORE LOSS	
26.91	0.21	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
27.04	0.13	100		70% MUDSTONE 30% SANDSTONE,FINE GRAINED	GREY. LENSES, BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.
27.43	0.39	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
27.57	0.14	100		80% SILTSTONE 20% MUDSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
28.27	0.70	100		60% MUDSTONE 40% SILTSTONE	GREY. BANDS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 452.24 M R.L.	
28.55	0.28	100	A1	60% CARBONACEOUS MUDSTONE 40% MUDSTONE	INTERCALATIONS, MUDSTONE, BLACK. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
28.62	0.07	100	A1	100% CARBONACEOUS MUDSTONE	COALY, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
28.63	0.01	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
28.72	0.09	100	A1	100% COAL, HEAVY DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
29.00	0.28	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.06	0.06	100	A2	100% CLAYSTONE	TUFFACEOUS, CREAM, UNWEATHERED, WEAK ROCK.
29.28	0.22	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.38	0.10	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.39	0.01	100	A2	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.71	0.32	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 80 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.72	0.01	100	A2	60% COAL, BRIGHT 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
29.83	0.11	100	A2	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.84	0.01	100	A2	60% TONSTEIN 40% COAL, DULL	GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
29.85	0.01	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
29.86	0.01	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.10	0.24	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.20	0.10	100	A2	100% CARBONACEOUS MUDSTONE	COALY, BADLY BROKEN, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
30.28	0.08	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.39	0.11	100	A2	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.65	0.26	100	A2	85% COAL, MID LUSTROUS - DULL 15% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
30.67	0.02	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.72	0.05	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.73	0.01	100	A2	100% CARBONACEOUS MUDSTONE	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.78	0.05	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
30.82	0.04	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.55 M; SAMPLED THICKNESS= 2.55 M	
31.50	0.68	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
100.00	68.50			100% SEDIMENTARY ROCK	UNWEATHERED, MODERATELY WEAK ROCK.
				*** CORE DESCRIPTION ***	
100.74	0.74	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
100.75	0.01			100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
100.77	0.02			100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
100.78	0.01			100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
100.81	0.03			100% MUDSTONE	TUFFACEOUS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
100.85	0.04			100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
100.89	0.04			100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.30	0.41			99% MUDSTONE 1% CARBONACEOUS MUDSTONE	MASSIVE, GREY. STREAKS, FRAGMENTS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
101.37	0.07	0		CORE LOSS	
101.63	0.26	100	T1	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.73	0.10	100	T1	60% MUDSTONE 40% CARBONACEOUS MUDSTONE	INTERCALATIONS, COARSE GRAINED, GREY. STREAKS, LENSES, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 378.78 M R.L.	
101.77	0.04	100	A3	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
101.84	0.07	0	A3	CORE LOSS	
101.95	0.11	100	A3	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.07	0.12	100	A3	55% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, MID LUSTROUS - DULL	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
102.13	0.06	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.15	0.02	100	A3	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.30	0.15	100	A3	85% COAL, MID LUSTROUS - DULL 15% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
102.32	0.02	100	A3	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.37	0.05	100	A3	100% CLAYSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
102.41	0.04	100	A3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.43	0.02	100	A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.66	0.23	100	A3	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.68	0.02	100	A3	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.70	0.02	100	A3	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.83	0.13	100	A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
102.95	0.12	100	A3	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.05	0.10	100	A3	100% TONSTEIN	CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
103.29	0.24	100	A3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.33	0.04	100	A3	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.36	0.03	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.44	0.08	100	A3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.46	0.02	100	A3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
103.48	0.02	100	A3	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.55	0.07	100	A3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.59	0.04	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.72	0.13	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.78	0.06	100	A3	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.89	0.11	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.16 M; SAMPLED THICKNESS= 2.16 M

104.13	0.24	100	T2	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
104.32	0.19	100	T2	100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
104.52	0.20	100		100% SILTSTONE	COALY, LAMINAE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
104.84	0.32	0		CORE LOSS	

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	2.55 M	28.27 - 30.82 M	2.55 M
L2	2.16 M	101.73 - 103.89 M	2.16 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
A1	28.27 - 28.72 M	0.45 M
A2	28.72 - 30.82 M	2.10 M
T1	101.37 - 101.73 M	0.36 M
A3	101.73 - 103.89 M	2.16 M
T2	103.89 - 104.32 M	0.43 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 177BL

HOLE TYPE	CORE
EASTING	591,226 M AM GRID
NORTHING	5,402,283 M AM GRID
ELEVATION	480.51 M
TOTAL DEPTH DRILLED	104.74 M
DRILLING STARTED	05/01/83
DRILLING TIME	3 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	200.0 MM
LENGTH CASED	19.50 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
19.50	19.50			100% DOLERITE	SCREE.
20.00	0.50			100% SEDIMENTARY ROCK	
26.50	6.50			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
26.65	0.15	100		98% MUDSTONE 2% SILTSTONE	MASSIVE, GREY. LENSES, LIGHT GREY. UNWEATHERED, WEAK ROCK.
26.74	0.09	100		75% SANDSTONE,FINE GRAINED 25% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, WEAK ROCK.
27.10	0.36	100		90% MUDSTONE 10% SANDSTONE,FINE GRAINED	MASSIVE, GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, WEAK ROCK.
27.87	0.77	100		95% MUDSTONE 5% SANDSTONE,FINE GRAINED	MASSIVE, GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, WEAK ROCK.
27.96	0.09	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, WEAK ROCK.
28.14	0.18	100	T1	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS MIDDLE 2 : 452.37 M R.L.	
28.21	0.07	100	A1	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
28.31	0.10	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
28.36	0.05	100	A1	98% CLAYSTONE 2% COAL	CALCAREOUS, WHITE. STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
28.41	0.05	100	A1	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK.
28.42	0.01	100	A1	60% CLAYSTONE 40% COAL, HEAVY DULL	BANDS, GREY-GREEN. BLACK. UNWEATHERED, WEAK ROCK.
28.50	0.08	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
28.65	0.15	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
28.79	0.14	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
28.80	0.01	100	A1	100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
29.14	0.34	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
29.20	0.06	100	A1	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, WEAK ROCK.
29.30	0.10	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
29.40	0.10	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
29.42	0.02	100	A1	100% COAL, INTERBANDED DULL AND BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
29.55	0.13	100	A1	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
29.68	0.13	100	A1	90% COAL, DULL WITH NUMEROUS BRIGHT BANDS 10% TONSTEIN	BADLY BROKEN, BLACK. BANDS, BADLY BROKEN, GREY. WITH PYRITE ON JOINTS, UNWEATHERED, WEAK ROCK.
30.09	0.41	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
30.13	0.04	100	A1	75% COAL, BRIGHT 25% COAL, DULL WITH FEW BRIGHT BANDS	BANDS, BLACK. BLACK. UNWEATHERED, WEAK ROCK.
30.40	0.27	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
30.55	0.15	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, WEAK ROCK.
30.56	0.01	100	A1	100% TONSTEIN	GREY, UNWEATHERED, WEAK ROCK.
30.63	0.07	100	A1	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.49 M; SAMPLED THICKNESS= 2.49 M	
30.84	0.21	100	T2	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
31.45	0.61	100		100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
100.00	68.55			100% SEDIMENTARY ROCK	UNWEATHERED.
				*** CORE DESCRIPTION ***	
100.64	0.64	100		99% SANDSTONE,MEDIUM GRAINED 1% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
100.72	0.08	100		58% SANDSTONE 40% MUDSTONE 2% COAL	MED.-FINE GRAINED, LIGHT GREY. PELLETAL, FRAGMENTS, GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH MUD PELLETS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.18	0.46	100		100% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, MODERATELY SPACED JOINTS, JOINTS DIP 30 DEG., OPEN, PLANAR, ROUGH DISCONTINUITIES.
101.23	0.05	100		60% SANDSTONE,FINE GRAINED 40% MUDSTONE	LIGHT GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
101.25	0.02	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, BASAL CONTACT ABRUPT.
101.27	0.02	100		100% MUDSTONE	CARBONACEOUS, BANDS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
101.33	0.06	100		95% COAL, DULL WITH FEW BRIGHT BANDS 5% MUDSTONE	BLACK. BANDS, BROWN. UNWEATHERED, MODERATELY WEAK ROCK.
101.54	0.21	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
101.69	0.15	100	T3	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
101.73	0.04	100	T3	90% MUDSTONE 10% COAL	GREY. STREAKS, BLACK. UNWEATHERED, VERY WEAK ROCK.
101.83	0.10	100	T3	100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, WEAK ROCK.
102.00	0.17	0		CORE LOSS	
102.14	0.14	100		100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 378.37 M R.L.	
102.20	0.06	100	A2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
102.35	0.15	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.43	0.08	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.47	0.04	100	A2	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
102.53	0.06	100	A2	100% COAL, MID LUSTROUS - DULL	UNWEATHERED, MODERATELY WEAK ROCK.
102.57	0.04	100	A2	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
102.58	0.01	100	A2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.82	0.24	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.84	0.02	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.90	0.06	100	A2	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
102.93	0.03	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
103.26	0.33	100	A2	80% COAL, DULL 20% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
103.30	0.04	100	A2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
103.48	0.18	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.55	0.07	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.58	0.03	100	A2	95% TONSTEIN 5% COAL	WHITE. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
103.63	0.05	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.70	0.07	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.72	0.02	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.75	0.03	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.79	0.04	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
103.85	0.06	100	A2	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 1.71 M; SAMPLED THICKNESS= 1.71 M	
103.88	0.03	100	T4	100% SANDSTONE,FINE GRAINED	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
103.89	0.01	100	T4	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
104.08	0.19	100	T4	100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
104.17	0.09	100		100% MUDSTONE	SILTSTONE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
104.74	0.57	100		85% SILTSTONE 15% SANDSTONE,FINE GRAINED	CARBONACEOUS, BANDS, GREY. BANDS, LENSES, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	2.49 M	28.14 - 30.63 M	2.49 M
L2	1.71 M	102.14 - 103.85 M	1.71 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	27.96 - 28.14 M	0.18 M
A1	28.14 - 30.63 M	2.49 M
T2	30.63 - 30.84 M	0.21 M
T3	101.54 - 101.83 M	0.29 M
A2	102.14 - 103.85 M	1.71 M
T4	103.85 - 104.08 M	0.23 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 178AL

HOLE TYPE	CORE
EASTING	592,751 M AM GRID
NORTHING	5,401,656 M AM GRID
ELEVATION	506.38 M
TOTAL DEPTH DRILLED	145.90 M
DRILLING STARTED	30/11/82
DRILLING TIME	15 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	170.0 MM
LENGTH CASED	11.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	BPB
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
13.30	13.30			100% DOLERITE	SCREE.
57.70	44.40			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
59.71	2.01	100		75% SANDSTONE,MEDIUM GRAINED 25% SANDSTONE,FINE GRAINED	MASSIVE, LIGHT GREY. BANDS, LIGHT GREY. UNWEATHERED, MODERATELY WEAK ROCK, WIDELY SPACED JOINTS, JOINTS DIP 75 DEG., TIGHT PLANAR, ROUGH DISCONTINUITIES.
59.91	0.20	100		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
60.75	0.84	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
60.80	0.05	100		55% SANDSTONE 45% COAL	MED.-FINE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
60.90	0.10	0		CORE LOSS	
61.56	0.66	100		98% SANDSTONE,MEDIUM GRAINED 2% COAL	LIGHT GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
61.90	0.34	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
61.91	0.01	100		100% SANDSTONE,FINE GRAINED	BANDS, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
61.97	0.06	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
62.05	0.08	100		75% SANDSTONE,FINE GRAINED 25% SILTSTONE	INTERCALATIONS, SILTSTONE, LIGHT GREY. LAMINAE, LENSES, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
62.32	0.27	100	T1	99% MUDSTONE 1% COAL	GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.38	0.06	100	T1	70% MUDSTONE 30% CARBONACEOUS MUDSTONE	GREY. BANDS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 1 : 444.00 M R.L.	
62.43	0.05	100	A1	95% CARBONACEOUS MUDSTONE 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.44	0.01	100	A1	100% SILTSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
62.50	0.06	100	A1	55% COAL, DULL 45% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.53	0.03	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.54	0.01	100	A1	100% COAL, BRIGHT	BLACK, WITH CALCITE ON CLEAT, UNWEATHERED, MODERATELY WEAK ROCK.
62.61	0.07	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.62	0.01	100	A1	70% COAL, DULL WITH FEW BRIGHT BANDS 30% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.65	0.03	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.67	0.02	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.71	0.04	100	A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.73	0.02	100	A2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
62.75	0.02	100	A2	100% MUDSTONE	CLAYSTONE, GREY, UNWEATHERED, VERY WEAK ROCK.
62.76	0.01	100	A2	100% CLAYSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, VERY WEAK ROCK.
62.89	0.13	100	A2	100% CLAYSTONE	CREAM, UNWEATHERED, WEAK ROCK.
62.96	0.07	100	A3	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.03	0.07	100	A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.08	0.05	0	A3	CORE LOSS	
63.15	0.07		A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.20	0.05	0	A3	CORE LOSS	
63.21	0.01	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.22	0.01	100	A3	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
63.24	0.02	100	A3	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK.
63.25	0.01	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
63.26	0.01	100	A3	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
63.27	0.01	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
63.28	0.01	100	A3	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
63.30	0.02	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
63.32	0.02	100	A3	100% COAL, BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
63.35	0.03	100	A3	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, WEAK ROCK.
63.36	0.01	100	A3	100% CLAYSTONE	BROWN, UNWEATHERED, VERY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.42	0.06	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
63.43	0.01	100	A3	100% TONSTEIN	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
63.57	0.14	100	A3	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.80	0.23	0	A3	CORE LOSS	
63.81	0.01	10	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.09	0.28	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.17	0.08	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.22	0.05	100	A3	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.25	0.03	100	A3	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.39	0.14	100	A3	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.49	0.10	100	A3	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.50	0.01	100	A3	100% MUDSTONE	BANDS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.53	0.03	100	A3	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.54	0.01	100	A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.58	0.04	100	A3	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.70	0.12	100	A3	75% COAL, DULL 25% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK, CLOSELY SPACED JOINTS, JOINTS DIP 50 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 2.32 M; SAMPLED THICKNESS= 2.32 M	
65.00	0.30	100	T2	55% SILTSTONE 44% MUDSTONE 1% COAL	INTERCALATIONS, MUDSTONE, LIGHT GREY. BANDS, LAMINAE, GREY. STREAKS, LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
65.22	0.22	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
65.26	0.04	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
65.28	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
65.31	0.03	100		100% TONSTEIN	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
65.32	0.01	100		100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
65.39	0.07	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
65.42	0.03	100		100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
65.45	0.03	100		100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
65.47	0.02			100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, WEAK ROCK.
65.70	0.23			75% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, INTERBANDED DULL AND BRIGHT 5% MUDSTONE	BLACK. BLACK. STREAKS, LENSES, GREY. UNWEATHERED, WEAK ROCK.
65.80	0.10	0		CORE LOSS	
				*** CHIP DESCRIPTION ***	
72.60	6.80			100% SEDIMENTARY ROCK	UNWEATHERED, WEAK ROCK.
				*** CORE DESCRIPTION ***	
73.03	0.43	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
73.04	0.01	100		100% CLAYSTONE	BANDS, GREY-BROWN, UNWEATHERED, VERY WEAK ROCK.
73.15	0.11	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
73.55	0.40	100	T3	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
				TOP OF MT. NICHOLAS MIDDLE 2 : 432.83 M R.L.	
73.64	0.09	100	A4	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
73.67	0.03	100	A4	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
73.69	0.02	100	A4	100% CLAYSTONE	TUFFACEOUS, CREAM, UNWEATHERED, WEAK ROCK.
73.76	0.07	100	A4	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.82	0.06	100	A4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.00	0.18	100	A4	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.66	0.66	100	A4	60% COAL, DULL 40% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.67	0.01	100	A4	60% TONSTEIN 40% COAL, DULL	WHITE. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.71	0.04	100	A4	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.72	0.01	100	A4	75% COAL, HEAVY DULL 25% MUDSTONE	BLACK. LENSES, STREAKS, GREY. UNWEATHERED, MODERATELY WEAK ROCK.
74.79	0.07	100	A4	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
74.98	0.15	100	A4	75% COAL, MID LUSTROUS - DULL 25% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.00	0.02	100	A4	100% CARBONACEOUS MUDSTONE	COALY, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.45	0.45	100	A4	50% COAL, MID LUSTROUS - DULL 30% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, DULL	BRIGHT COAL, LAMINAE, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.54	0.09	100	A4	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.62	0.08	100	A4	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.63	0.01	100	A4	55% COAL, DULL 45% COAL, BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.74	0.11	100	A4	75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 25% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.75	0.01	100	A4	100% CARBONACEOUS MUDSTONE	DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
75.82	0.07	100	A4	80% COAL, MID LUSTROUS - DULL 20% COAL, INTERBANDED DULL AND BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.84	0.02	100	A4	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.85	0.01	100	A4	100% TONSTEIN	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
75.88	0.03	100	A4	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.89	0.01	100	A4	60% TONSTEIN 40% COAL, DULL WITH FEW BRIGHT BANDS	CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.91	0.02	100	A4	100% COAL, HEAVY DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.00	0.09	100	A4	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
76.08	0.08	100	A4	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
76.10	0.02	100	A4	100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.55 M; SAMPLED THICKNESS= 2.55 M	
76.12	0.02	100	T4	100% CLAYSTONE	COALY, STREAKS, WHITE, UNWEATHERED, WEAK ROCK.
76.16	0.04	100	T4	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
76.35	0.19	100	T4	100% MUDSTONE	MASSIVE, CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
76.51	0.16	100	T4	100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
77.10	0.59	100		100% MUDSTONE	MASSIVE, SILTSTONE, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
				*** CHIP DESCRIPTION ***	
132.20	55.10			100% SEDIMENTARY ROCK	UNWEATHERED, WEAK ROCK.
				*** CORE DESCRIPTION ***	
133.21	1.01	75		70% MUDSTONE 30% SILTSTONE	SILTSTONE, MASSIVE, GREY. BANDS, LENSES, GREY. UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
133.28	0.07	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK.
133.79	0.51	100		100% SILTSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK.
133.91	0.12	100		100% SANDSTONE,FINE GRAINED	LIGHT GREY, UNWEATHERED, WEAK ROCK.
133.99	0.08	100		100% SILTSTONE	GREY, UNWEATHERED, WEAK ROCK.
134.52	0.53	100		100% SANDSTONE	MED.-FINE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK.
134.74	0.22	100		100% SILTSTONE	CARBONACEOUS, LAMINAE, GREY, UNWEATHERED, WEAK ROCK.
135.20	0.46	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, BADLY BROKEN, LIGHT GREY, UNWEATHERED, WEAK ROCK.
137.15	1.95	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS.
137.46	0.31	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, CALCAREOUS, LIGHT GREY, UNWEATHERED, WEAK ROCK.
137.51	0.05	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, LIGHT GREY. UNWEATHERED, WEAK ROCK.
142.35	4.84	100		75% SANDSTONE,MEDIUM GRAINED 23% SANDSTONE 2% COAL	MASSIVE, LIGHT GREY. MED.-FINE GRAINED, MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.
142.50	0.15	100		80% SANDSTONE,MEDIUM GRAINED 20% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
142.73	0.23	100	T5	98% SANDSTONE,MEDIUM GRAINED 2% COAL	MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 363.65 M R.L.	
142.77	0.04	100	A5	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.78	0.01	100	A5	98% MUDSTONE 2% COAL	TUFFACEOUS, GREY-BROWN. STREAKS, BLACK. UNWEATHERED, WEAK ROCK.
142.79	0.01	100	A5	95% COAL, DULL 5% MUDSTONE	BLACK. STREAKS, GREY. UNWEATHERED, WEAK ROCK.
142.81	0.02	100	A5	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, WEAK ROCK.
142.82	0.01	100	A5	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
142.87	0.05	100	A5	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, WEAK ROCK.
142.98	0.11	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, WEAK ROCK.
143.09	0.11	100	A5	100% COAL, MID LUSTROUS - DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
143.17	0.08	100	A5	70% COAL, MID LUSTROUS - DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN. UNWEATHERED, WEAK ROCK.
143.47	0.30	100	A5	50% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, MID LUSTROUS - DULL	BADLY BROKEN, BLACK. BADLY BROKEN. BLACK. UNWEATHERED, WEAK ROCK.
143.48	0.01	100	A5	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, WEAK ROCK.
143.53	0.05	100	A5	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
143.55	0.02	100	A5	75% COAL, DULL 25% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK.
143.58	0.03	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
143.62	0.04	100	A5	75% COAL, DULL 25% MUDSTONE	BLACK. BANDS, GREY. UNWEATHERED, WEAK ROCK.
143.67	0.05	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
143.69	0.02	100	A5	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
143.71	0.02	100	A5	100% MUDSTONE	GREY-BROWN, UNWEATHERED, WEAK ROCK.
143.75	0.04	100	A5	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, WEAK ROCK.
143.85	0.10	100	A5	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
143.98	0.13	100	A5	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
144.10	0.12	100	A5	60% COAL, DULL WITH FEW BRIGHT BANDS 40% COAL, MID LUSTROUS - DULL	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, WEAK ROCK.
144.20	0.10	100	A5	100% COAL, MID LUSTROUS	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
144.54	0.34	0	A5	CORE LOSS	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
144.69	0.15	100	A5	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
144.72	0.03	100	A5	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK.
144.79	0.07	100	A5	100% COAL, DULL	BLACK, UNWEATHERED, WEAK ROCK.
144.83	0.04	100	A5	100% TONSTEIN	WHITE, UNWEATHERED, WEAK ROCK.
145.08	0.25	100	A5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.12	0.04	100	A5	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.31	0.19	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.37	0.06	100	A5	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
145.53	0.16	100	A5	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.63	0.10	100	A5	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.77	0.14	100	A5	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, WEAK ROCK.
145.79	0.02	100	A5	100% MUDSTONE	BANDS, GREY, UNWEATHERED, WEAK ROCK.
145.84	0.05	100	A5	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 3.11 M; SAMPLED THICKNESS= 3.11 M	
145.88	0.04	100		100% MUDSTONE	BADLY BROKEN, GREY, UNWEATHERED, WEAK ROCK.
145.89	0.01	100		100% CARBONACEOUS MUDSTONE	BROWN-BLACK, UNWEATHERED, WEAK ROCK.
145.90	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	2.32 M	62.38 - 64.70 M	2.32 M
M2	2.55 M	73.55 - 76.10 M	2.55 M
L2	3.11 M	142.73 - 145.84 M	3.11 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
T1	62.05 - 62.38 M	0.33 M
A1	62.38 - 62.71 M	0.33 M
A2	62.71 - 62.89 M	0.18 M
A3	62.89 - 64.70 M	1.81 M
T2	64.70 - 65.00 M	0.30 M
T3	73.15 - 73.55 M	0.40 M
A4	73.55 - 76.10 M	2.55 M
T4	76.10 - 76.51 M	0.41 M
T5	142.50 - 142.73 M	0.23 M
A5	142.73 - 145.84 M	3.11 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

GY 178BL

HOLE TYPE	CORE
EASTING	592,768 M AM GRID
NORTHING	5,401,650 M AM GRID
ELEVATION	506.38 M
TOTAL DEPTH DRILLED	145.55 M
DRILLING STARTED	08/01/83
DRILLING TIME	5 DAYS
CORE SIZE	100.0 MM
HOLE SIZE	200.0 MM
LENGTH CASED	12.00 M
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	BPB
LITHOLOGICAL DESCRIPTION BY	P.SANSOM
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
12.00	12.00			100% DOLERITE	SCREE.
60.00	48.00			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
60.35	0.35	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
60.44	0.09	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	SILTY, GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
60.66	0.22	100		95% MUDSTONE 5% CARBONACEOUS MUDSTONE	SILTY, GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 20 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
				TOP OF MT. NICHOLAS MIDDLE 1 : 445.72 M R.L.	
60.69	0.03	100	A1	75% SILTSTONE 25% CARBONACEOUS MUDSTONE	CARBONACEOUS, GREY. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
60.90	0.21	100	A1	60% COAL, DULL WITH FEW BRIGHT BANDS 40% COAL, MID LUSTROUS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
60.99	0.09	100	A1	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.03	0.04	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.16	0.13	100	A1	100% CLAYSTONE	TUFFACEOUS, GREY, UNWEATHERED, VERY WEAK ROCK.
61.18	0.02	100	A1	100% CARBONACEOUS MUDSTONE	COALY, BLACK, UNWEATHERED, WEAK ROCK.
61.29	0.11	100	A1	70% COAL, DULL 30% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, WEAK ROCK.
61.38	0.09	100	A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.47	0.09	100	A1	100% CLAYSTONE	TUFFACEOUS, GREY, UNWEATHERED, VERY WEAK ROCK.
61.50	0.03	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.62	0.12	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
61.66	0.04	100	A1	100% CLAYSTONE	CARBONACEOUS, TUFFACEOUS, BROWN, UNWEATHERED, VERY WEAK ROCK.
61.77	0.11	100	A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.13	0.36	100	A1	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.15	0.02	100	A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.23	0.08	100	A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
62.24	0.01	100	A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.32	0.08	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.34	0.02	100	A1	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.42	0.08	100	A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.49	0.07	100	A1	70% COAL, MID LUSTROUS 30% COAL, MID LUSTROUS - BRIGHT	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.63	0.14	100	A1	60% COAL, DULL 30% COAL, MID LUSTROUS - BRIGHT 10% COAL, BRIGHT	BLACK. BLACK. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.73	0.10	100	A1	80% COAL, MID LUSTROUS - BRIGHT 20% COAL, BRIGHT	BADLY BROKEN, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
62.76	0.03	100	A1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.88	0.12	100	A1	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
62.90	0.02	100	A1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
62.96	0.06	100	A1	100% COAL, MID LUSTROUS - BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.00	0.04	100	A1	90% MUDSTONE 10% COAL, BRIGHT	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
63.06	0.06	100	A1	70% COAL, DULL 30% COAL, MID LUSTROUS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
63.10	0.04	100	A1	60% CARBONACEOUS MUDSTONE 40% COAL, BRIGHT	BLACK. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
63.19	0.09	100	A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.20	0.01	100	A1	100% MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
63.30	0.10	100	A1	55% COAL, DULL WITH FEW BRIGHT BANDS 25% CARBONACEOUS MUDSTONE 20% COAL, MID LUSTROUS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 2.64 M; SAMPLED THICKNESS= 2.64 M

63.35	0.05	100	T1	100% MUDSTONE	CARBONACEOUS, BROWN-BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
63.49	0.14	100	T1	100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
63.57	0.08	100		100% SILTSTONE	LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
63.65	0.08	100		100% SILTSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
63.70	0.05	100		100% SILTSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
63.95	0.25	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.01	0.06	100		90% CARBONACEOUS MUDSTONE 10% COAL	CALCAREOUS, WHITE. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.05	0.04	100		90% CARBONACEOUS MUDSTONE 10% COAL	DARK GREY. LAMINAE, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.08	0.03	100		100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.09	0.01	100		75% CARBONACEOUS MUDSTONE 25% COAL	DARK GREY. LAMINAE, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.23	0.14	100		50% COAL, DULL WITH FEW BRIGHT BANDS 48% COAL, MID LUSTROUS 2% MUDSTONE	BLACK. BLACK. STREAKS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
64.28	0.05	100		95% COAL, DULL 5% MUDSTONE	BLACK. PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
64.36	0.08	100		100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.42	0.06	100		100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.47	0.05	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.48	0.01	100		95% CARBONACEOUS MUDSTONE 5% COAL	BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.49	0.01	100		80% CARBONACEOUS MUDSTONE 20% COAL, BRIGHT	COALY, BLACK. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.52	0.03	100		100% SILTSTONE	TUFFACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.54	0.02	100		75% MUDSTONE 25% COAL	CARBONACEOUS, GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.55	0.01	100		55% COAL, INTERBANDED DULL AND BRIGHT 45% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
64.66	0.11	100		80% MUDSTONE 15% COAL 5% MUDSTONE	GREY. STREAKS, BLACK. CARBONACEOUS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
64.72	0.06	100		100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.73	0.01	100		80% MUDSTONE 20% COAL	CARBONACEOUS, DARK GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
64.74	0.01	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.75	0.01	100		100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
64.81	0.06	100		100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
64.82	0.01	100		100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
64.96	0.14	100		55% COAL, INTERBANDED DULL AND BRIGHT 25% COAL, BRIGHT 20% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				*** CHIP DESCRIPTION ***	
71.50	6.54			100% SEDIMENTARY ROCK	UNWEATHERED, MODERATELY WEAK ROCK.
				*** CORE DESCRIPTION ***	
71.94	0.44	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, WEAK ROCK.
71.95	0.01	100		60% MUDSTONE 40% COAL	GREY. BANDS, BLACK. UNWEATHERED, WEAK ROCK.
72.10	0.15	100		100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
72.34	0.24	100	T2	100% MUDSTONE	GREY, UNWEATHERED, WEAK ROCK.
				TOP OF MT. NICHOLAS MIDDLE 2 : 434.04 M R.L.	
72.42	0.05	100	A2	100% COAL, MID LUSTROUS - BRIGHT	BADLY BROKEN, BLACK, UNWEATHERED, WEAK ROCK.
72.46	0.04	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, VERY WEAK ROCK.
72.49	0.03	100	A2	100% MUDSTONE	BROWN, UNWEATHERED, WEAK ROCK.
72.52	0.03	100	A2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.60	0.08	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
72.63	0.03	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
72.87	0.24	100	A2	75% COAL, MID LUSTROUS 25% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK. BLACK. WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
72.88	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.00	0.12	100	A2	90% COAL, MID LUSTROUS - DULL 10% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
73.01	0.01	100	A2	98% MUDSTONE 2% COAL	BANDS, GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
73.06	0.05	100	A2	100% COAL, HEAVY DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.10	0.04	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.20	0.10	100	A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.25	0.05	100	A2	100% COAL, DULL	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.26	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.33	0.07	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.47	0.14	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.51	0.04	100	A2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.58	0.07	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.71	0.13	100	A2	75% COAL, MID LUSTROUS - DULL 25% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
73.82	0.11	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
73.85	0.01	100	A2	100% MUDSTONE	CALCAREOUS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
73.86	0.03	100	A2	100% CARBONACEOUS MUDSTONE	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
73.88	0.02	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.22	0.34	100	A2	70% COAL, MID LUSTROUS - DULL 30% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.42	0.20	100	A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.43	0.01	100	A2	100% MUDSTONE	TUFFACEOUS, LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
74.48	0.05	100	A2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
74.65	0.17	100	A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.66	0.01	100	A2	100% COAL, BRIGHT	BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.89	0.23	100	A2	80% COAL, DULL WITH FEW BRIGHT BANDS 20% COAL, INTERBANDED DULL AND BRIGHT	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
74.90	0.01	100	A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
74.93	0.03	100	A2	70% CARBONACEOUS MUDSTONE 30% CARBONACEOUS MUDSTONE	BLACK. CALCAREOUS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
75.00	0.07	100	A2	90% COAL, DULL 10% COAL, DULL WITH FEW BRIGHT BANDS	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.03	0.03	100	A2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
75.13	0.10	100	A2	65% COAL, DULL 25% COAL, HEAVY DULL 10% COAL, BRIGHT	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.79 M; SAMPLED THICKNESS= 2.79 M	
75.18	0.05	100	T3	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
75.38	0.20	100	T3	99% MUDSTONE 1% COAL	GREY. STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
75.46	0.08	100	T3	100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
76.50	1.04	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
				*** CHIP DESCRIPTION ***	
140.50	64.00			100% SEDIMENTARY ROCK	
				*** CORE DESCRIPTION ***	
141.25	0.75	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS, WIDELY SPACED JOINTS, JOINTS DIP 85 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES.
141.29	0.04	100		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, LIGHT BROWN, UNWEATHERED, VERY WEAK ROCK.
141.37	0.08	100	T4	80% SANDSTONE 20% COAL	MED.-COARSE GRAINED, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
141.45	0.08	100	T4	100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, WEAK ROCK.
141.55	0.10	100	T4	75% SANDSTONE,MEDIUM GRAINED 25% COAL	LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, WEAK ROCK, BASAL CONTACT EROSIONAL, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS.
				TOP OF MT. NICHOLAS LOWER 2 : 364.83 M R.L.	
142.20	0.65	100	A3	50% COAL 30% COAL, DULL 20% COAL, MID LUSTROUS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, VERY WEAK ROCK.
142.21	0.01	100	A3	100% MUDSTONE	BANDS, BADLY BROKEN, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
142.98	0.77	100	A3	60% COAL, MID LUSTROUS 25% COAL, DULL 15% COAL, DULL WITH FEW BRIGHT BANDS	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 60 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
143.01	0.03	100	A3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
144.13	1.12	100	A3	45% COAL, DULL 30% COAL, DULL WITH FEW BRIGHT BANDS 25% COAL, MID LUSTROUS	BADLY BROKEN, BLACK. BADLY BROKEN. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
144.25	0.12	100	A3	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
144.45	0.20	100	A3	50% COAL, INTERBANDED DULL AND BRIGHT 45% COAL, MID LUSTROUS - BRIGHT 5% COAL, BRIGHT	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.90 M; SAMPLED THICKNESS= 2.90 M	
144.76	0.31	100	T5	100% MUDSTONE	GREY, UNWEATHERED, VERY WEAK ROCK, WITH PLANT REMAINS.
145.53	0.77	100		100% MUDSTONE	SILTY, GREY, UNWEATHERED, WEAK ROCK, WITH PLANT REMAINS.
145.55	0.02	100		100% CLAYSTONE	GREY, UNWEATHERED, VERY WEAK ROCK.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	2.64 M	60.66 - 63.30 M	2.64 M
M2	2.79 M	72.34 - 75.13 M	2.79 M
L2	2.90 M	141.55 - 144.45 M	2.90 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
A1	60.66 - 63.30 M	2.64 M
T1	63.30 - 63.49 M	0.19 M
T2	72.10 - 72.34 M	0.24 M
A2	72.34 - 75.13 M	2.79 M
T3	75.13 - 75.46 M	0.33 M
T4	141.29 - 141.55 M	0.26 M
A3	141.55 - 144.45 M	2.90 M
T5	144.45 - 144.76 M	0.31 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM8

HOLE TYPE	CORE
EASTING	589,795 M AM GRID
NORTHING	5,399,657 M AM GRID
ELEVATION	559.87 M
TOTAL DEPTH DRILLED	250.70 M
DRILLING STARTED	12/ 5/69
DRILLING TIME	35 DAYS
CORE SIZE	42.0 MM
HOLE SIZE	54.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CHIP DESCRIPTION ***	GEOLOGICAL DESCRIPTION
6.10	6.10			%	
					NOTE: COGEO INPERPRETATION FROM MINES DEP LOGS.
				*** CORE DESCRIPTION ***	
8.23	2.13			100% SANDSTONE	LITHIC, CARBONACEOUS WISPS, DARK GREY.
8.53	0.30			100% MUDSTONE	GREY.
11.58	3.05			100% SANDSTONE	LITHIC, CARBONACEOUS WISPS, DARK GREY.
14.63	3.05			100% SANDSTONE	LITHIC, DARK GREY.
14.78	0.15			100% SANDSTONE,COARSE GRAINED	LITHIC, DARK GREY.
14.86	0.08			100% COAL	
16.15	1.29			100% SANDSTONE	LITHIC, DARK GREY.
16.46	0.31			100% SANDSTONE	LITHIC, LIGHT GREY.
16.61	0.15			100% MUDSTONE	GREY.
17.45	0.84			100% SANDSTONE	LITHIC, LIGHT GREY.
17.50	0.05			100% PEBBLE CONGLOMERATE	ARGILLACEOUS, PELLETAL, LIGHT GREY.
17.68	0.18			100% SANDSTONE	LITHIC, LIGHT GREY.
17.98	0.30			100% SANDSTONE	LITHIC, CALCAREOUS, LIGHT GREY.
18.24	0.26			100% MUDSTONE	GREY.
18.90	0.66			100% SANDSTONE	LITHIC, CALCAREOUS, LIGHT GREY.
21.79	2.89			100% SANDSTONE	LITHIC, LIGHT GREY.
23.32	1.53			90% MUDSTONE 10% SILTSTONE	INTERCALATIONS, UPPER CONTACT, GREY. INTERCALATIONS, GREY.
				TOP OF MT. NICHOLAS MIDDLE 1 : 536.55 M R.L.	
23.57	0.25			100% COAL	
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.25 M; SAMPLED THICKNESS= 0.00 M	
23.62	0.05			100% CLAY	BROWN.
26.03	2.41			100% MUDSTONE	GREY.
26.14	0.11			100% CLAY	BROWN.
26.92	0.78			100% MUDSTONE	GREY.
27.28	0.36			100% COAL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
27.30	0.02			50% COAL 50% MUDSTONE	GRADING TO, LOWER CONTACT. GREY.
28.80	1.50			100% MUDSTONE	GREY.
28.98	0.18			70% MUDSTONE 30% COAL	INTERCALATIONS, GREY. MUDSTONE, BANDS.
29.41	0.43			100% MUDSTONE	GREY.
30.78	1.37			70% MUDSTONE 20% SANDSTONE,FINE GRAINED 10% SILTSTONE	INTERCALATIONS, GREY. INTERCALATIONS. INTERCALATIONS. JOINTS DIP 60 DEG.
31.80	1.02			100% MUDSTONE	GREY.
32.36	0.56			100% COAL	
36.07	3.71			100% MUDSTONE	GREY.
41.00	4.93			100% SILTSTONE	BANDS, WITH CONVOLUTED BEDDING.
41.50	0.50			95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC. LUSTROUS. THICKLY BEDDED, BEDS DIP 23 DEG.
41.55	0.05			100% CLAY	COALY.
42.16	0.61			95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC. LUSTROUS. THICKLY BEDDED, BEDS DIP 23 DEG.
42.82	0.66			95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC, CALCAREOUS. LUSTROUS. THICKLY BEDDED, BEDS DIP 23 DEG.
45.14	2.32			95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC, CALCAREOUS. LUSTROUS. THICKLY BEDDED, BEDS DIP 23 DEG.
				TOP OF MT. NICHOLAS MIDDLE 2 : 514.73 M R.L.	
45.82	0.68			100% COAL	GRADING TO, LOWER CONTACT.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 0.68 M; SAMPLED THICKNESS= 0.00 M	
46.00	0.18			100% MUDSTONE	BLACK.
48.72	2.72			70% SILTSTONE 30% MUDSTONE	BANDS, GRADING TO. BANDS.
50.67	1.95			60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS, BANDS. WITH CONVOLUTED BEDDING.
53.57	2.90			60% SANDSTONE,MEDIUM GRAINED 40% SILTSTONE	LITHIC. INTERCALATIONS, BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
54.20	0.63			100% SANDSTONE	LITHIC, BEDS DIP 25 DEG.
54.43	0.23			70% SANDSTONE,FINE GRAINED 30% SILTSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS, BANDS, BLACK. BEDS DIP 25 DEG.
60.23	5.80			95% SANDSTONE 5% COAL	INTERCALATIONS, CALCAREOUS. LENSES, INTERCALATIONS. BEDS DIP 25 DEG., WITH CARBONACEOUS WISPS.
60.96	0.73			99% MUDSTONE 1% COAL	CARBONACEOUS, GRADING TO. LENSES.
61.21	0.25			100% SILTSTONE	GREY, WITH CONVOLUTED BEDDING.
61.97	0.76			100% SANDSTONE,FINE GRAINED	
63.12	1.15			100% SANDSTONE,MEDIUM GRAINED	LITHIC.
63.20	0.08			100% SILTSTONE	WITH CONVOLUTED BEDDING, WITH LOAD CASTS.
64.47	1.27			100% SANDSTONE,MEDIUM GRAINED	LITHIC.
64.54	0.07			100% SILTSTONE	BANDS.
65.38	0.84			100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCAREOUS.
67.97	2.59			95% SANDSTONE,COARSE GRAINED 5% COAL	LITHIC, INTERCALATIONS. INTERCALATIONS, LENSES.
73.33	5.36			100% SANDSTONE,COARSE GRAINED	LITHIC, CALCAREOUS.
74.12	0.79			100% SANDSTONE,COARSE GRAINED	LITHIC, WITH CARBONACEOUS WISPS.
75.34	1.22			70% SANDSTONE,COARSE GRAINED 30% MUDSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS. WITH CARBONACEOUS WISPS.
76.33	0.99			100% SANDSTONE,COARSE GRAINED	LITHIC, CALCAREOUS.
76.88	0.55			60% SANDSTONE,MEDIUM GRAINED 40% PEBBLE CONGLOMERATE	LITHIC, INTERCALATIONS. ARGILLACEOUS, PELLETAL. WITH CARBONACEOUS WISPS.
83.72	6.84			100% SANDSTONE,MEDIUM GRAINED	LITHIC, THICKLY BEDDED, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS.
87.98	4.26			100% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, CALCAREOUS.
88.29	0.31			95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,MEDIUM GRAINED	LITHIC, INTERCALATIONS. COALY, LENSES.
93.63	5.34			60% SANDSTONE,MEDIUM GRAINED 40% MUDSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS, GREY.
108.28	14.65			100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCAREOUS.
118.11	9.83			95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC. BANDS, LENSES.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
121.77	3.66			34% MUDSTONE 33% SILTSTONE 33% SANDSTONE,FINE GRAINED	INTERCALATIONS, DARK GREY. INTERCALATIONS, DARK GREY. INTERCALATIONS, DARK GREY. WITH CONVOLUTED BEDDING.
					NOTE: SPLIT BY CORE RELOGGED+SAMPLED BY SHELL GEO P.S.
123.63	1.86	100		90% SANDSTONE,FINE GRAINED 10% PEBBLE CONGLOMERATE	LITHIC, CALCAREOUS. LOWER CONTACT, PELLETAL. WITH NORMAL GRADED BEDDING.
124.05	0.42	100		100% SANDSTONE,MEDIUM GRAINED	BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 1 : 435.82 M R.L.	
124.36	0.31	100	1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.44	0.08	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.46	0.02	100	1	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.50	0.04	100	1	100% COAL, DULL	GRADING TO, COARSE GRAINED, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.51	0.01	100	1	100% MUDSTONE	COALY, STREAKS, CREAM, UNWEATHERED, MODERATELY WEAK ROCK.
124.97	0.46	100	1	75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. GRADING TO, COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.98	0.01	100	1	100% MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.22	0.24	100	1	75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. GRADING TO, COARSE GRAINED, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.25	0.03	100	1	100% MUDSTONE	COALY, STREAKS, WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
125.66	0.41	100	1	80% COAL, DULL 15% COAL, MID LUSTROUS 5% CARBONACEOUS MUDSTONE	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
125.88	0.22	100	1	75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% COAL, DULL 5% COAL, BRIGHT	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
					NOTE: SHELL ANALYSIS NO DM8A1 FROM 124.05 TO 125.88M
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.83 M; SAMPLED THICKNESS= 1.83 M	
125.96	0.08	100		100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
126.54	0.58	100		100% MUDSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
126.57	0.03	100		60% MUDSTONE 40% COAL	LOWER CONTACT, GRADING TO, GREY. BRIGHT COAL, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
				TOP OF MT. NICHOLAS LOWER 2 : 433.30 M R.L.	
126.87	0.30	100		75% COAL, DULL 20% COAL, HEAVY DULL 5% COAL, MID LUSTROUS	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.26	0.39	100	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.28	0.02	100	2	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK.
127.48	0.20	100	2	90% COAL, DULL 5% MUDSTONE 5% COAL, BRIGHT	BLACK. PELLETAL, GREY. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
127.52	0.04	100	2	95% MUDSTONE 5% MUDSTONE	GREY. PELLETAL, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
127.65	0.13	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
127.66	0.01	100	2	60% COAL, DULL 40% MUDSTONE	BLACK. BANDS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
127.78	0.12	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.66	0.88	100	2	80% COAL, DULL 10% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. BLACK. BANDS. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
128.68	0.02	100	2	100% MUDSTONE	BANDS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
128.81	0.13	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.86	0.05	100	2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.90	0.04	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
128.96	0.06	100	2	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
129.00	0.04	100	2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
129.06	0.06	100	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
129.16	0.10	100	2	60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% COAL, BRIGHT 20% COAL, MID LUSTROUS	BLACK. BANDS, BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
					NOTE: SHELL ANALYSIS NO DM8A2 FROM 126.57 TO 129.16M
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.59 M; SAMPLED THICKNESS= 2.29 M	
130.15	0.99			100% MUDSTONE	GREY.
142.11	11.96			60% SANDSTONE,FINE GRAINED 35% SILTSTONE 5% MUDSTONE	INTERCALATIONS. INTERCALATIONS. PELLETAL. WITH CONVOLUTED BEDDING.
143.33	1.22			60% SANDSTONE,FINE GRAINED 30% SILTSTONE 10% COAL	INTERCALATIONS. INTERCALATIONS. BANDS, LENSES.
144.78	1.45			100% SILTSTONE	WITH CONVOLUTED BEDDING.
145.39	0.61			100% SILTSTONE	CARBONACEOUS.
150.77	5.38			70% SILTSTONE 30% SANDSTONE,FINE GRAINED	INTERCALATIONS. INTERCALATIONS.
152.40	1.63	100	3	85% MUDSTONE 15% COAL, CANNEL	CARBONACEOUS.
152.70	0.30			100% MUDSTONE	GREY.
				TOP OF DALMAYNE E : 407.17 M R.L.	
153.16	0.46	100	4	100% COAL	DULL COAL.
153.17	0.01	100	4	100% MUDSTONE	BANDS.
153.42	0.25	100	4	100% COAL	BRIGHT COAL.
156.16	2.74			100% MUDSTONE	GREY.
156.24	0.08	100	5	100% COAL	DULL COAL.
157.03	0.79	100	5	100% COAL	BRIGHT COAL.
157.84	0.81	100	5	80% COAL 20% COAL	DULL COAL, INTERCALATIONS. BRIGHT COAL, BANDS.
158.37	0.53			100% MUDSTONE	GREY.
161.19	2.82			100% SANDSTONE	GRADING TO, MUDSTONE.
161.39	0.20			100% SILTSTONE	BANDS.
161.72	0.33	100	6	90% COAL 10% COAL	DULL COAL. BRIGHT COAL.
161.95	0.23	100	6	100% MUDSTONE	DARK BROWN.
162.52	0.57	100	6	100% COAL	DULL COAL.
162.76	0.24	100	6	100% COAL	BRIGHT COAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
				BASE OF DALMAYNE E : THICKNESS= 10.06 M; SAMPLED THICKNESS= 3.77 M	
168.25	5.49			90% SANDSTONE 10% SILTSTONE	LITHIC, INTERCALATIONS, BROWN. INTERCALATIONS, BANDS.
170.31	2.06			100% MUDSTONE	BANDS, DARK GREY.
172.82	2.51			100% SILTSTONE	GREY.
173.02	0.20			100% SANDSTONE	LITHIC, CALCAREOUS, CREAM, SLIGHTLY WEATHERED, WEAKLY CEMENTED.
173.74	0.72			100% MUDSTONE	GREY.
175.90	2.16			100% SANDSTONE,FINE GRAINED	LITHIC.
186.10	10.20			100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCAREOUS.
186.30	0.20			100% SILTSTONE	GREY.
186.40	0.10			100% MUDSTONE	GRADING TO, DARK GREY.
186.97	0.57			100% SANDSTONE	LITHIC, LIGHT GREY, WITH NORMAL GRADED BEDDING.
				TOP OF DALMAYNE F : 372.90 M R.L.	
187.22	0.25			100% COAL	
				BASE OF DALMAYNE F : THICKNESS= 0.25 M; SAMPLED THICKNESS= 0.00 M	
187.76	0.54			60% SANDSTONE,FINE GRAINED 40% MUDSTONE	INTERCALATIONS. DARK GREY. WITH CONVOLUTED BEDDING, WITH LOAD CASTS, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
190.50	2.74			100% MUDSTONE	GREY.
204.00	13.50			70% SANDSTONE 30% SILTSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS, GREY.
204.30	0.30			90% MUDSTONE 10% PEBBLE CONGLOMERATE	GRADING TO, BANDS, GREY. MUDSTONE. BEDS DIP 60 DEG., WITH NORMAL GRADED BEDDING.
206.20	1.90			100% SANDSTONE,MEDIUM GRAINED	LITHIC, CALCAREOUS.
212.40	6.20			60% SILTSTONE 20% MUDSTONE 20% SANDSTONE	INTERCALATIONS, BANDS. INTERCALATIONS, BANDS. INTERCALATIONS, BANDS.
216.10	3.70			100% SANDSTONE	SCREE, CALCAREOUS, WITH NORMAL GRADED BEDDING.
221.38	5.28			100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, WITH NORMAL GRADED BEDDING.
221.80	0.42			100% SANDSTONE,FINE GRAINED	LITHIC, LIGHT GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION
				*** CORE DESCRIPTION ***	
222.60	0.80			100% MUDSTONE	DARK GREY.
227.50	4.90			100% SANDSTONE	QUARTZOSE.
250.70	23.20			100% PEBBLE CONGLOMERATE	MUDSTONE, CALCAREOUS, WITH ROUNDED QUARTZ AND ANGULAR QUARTZ.

NOTE: END OF HOLE

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M1	0.00 M	23.32 - 23.57 M	0.25 M
M2	0.00 M	45.14 - 45.82 M	0.68 M
L1	1.83 M	124.05 - 125.88 M	1.83 M
L2	2.29 M	126.57 - 129.16 M	2.59 M
DE	3.77 M	152.70 - 162.76 M	10.06 M
DF	0.00 M	186.97 - 187.22 M	0.25 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	124.05 - 125.88 M	1.83 M
2	126.87 - 129.16 M	2.29 M
3	150.77 - 152.40 M	1.63 M
4	152.70 - 153.42 M	0.72 M
5	156.16 - 157.84 M	1.68 M
6	161.39 - 162.76 M	1.37 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM8R

HOLE TYPE	CORE
EASTING	589,795 M AM GRID
NORTHING	5,399,657 M AM GRID
ELEVATION	559.87 M
TOTAL DEPTH DRILLED	250.70 M
DRILLING STARTED	12/05/69
DRILLING TIME	35 DAYS
CORE SIZE	42.0 MM
HOLE SIZE	54.7 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
124.05	124.05	0		CORE LOSS	
		TOP OF MT. NICHOLAS LOWER 1 : 435.82 M R.L.			
124.36	0.31	100	DM8A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK.
124.44	0.08	100	DM8A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
124.46	0.02	100	DM8A1	100% MUDSTONE	GREY.
124.50	0.04	100	DM8A1	100% COAL, DULL	GRADING TO, COARSE GRAINED, BLACK.
124.51	0.01	100	DM8A1	100% MUDSTONE	COALY, STREAKS, CREAM.
124.97	0.46	100	DM8A1	75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. GRADING TO, COARSE GRAINED, BLACK.
124.98	0.01	100	DM8A1	100% MUDSTONE	BLACK.
125.22	0.24	100	DM8A1	75% COAL, DULL 25% COAL, HEAVY DULL	BLACK. GRADING TO, COARSE GRAINED, BLACK.
125.25	0.03	100	DM8A1	100% MUDSTONE	COALY, STREAKS, WHITE.
125.66	0.41	100	DM8A1	80% COAL, DULL 15% COAL, MID LUSTROUS 5% CARBONACEOUS MUDSTONE	BLACK. BLACK. BLACK.
125.88	0.22	100	DM8A1	75% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% COAL, DULL 5% COAL, BRIGHT	BLACK. BLACK. BLACK.
		BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.83 M; SAMPLED THICKNESS= 1.83 M			
126.57	0.69	0		CORE LOSS	
		TOP OF MT. NICHOLAS LOWER 2 : 433.30 M R.L.			
126.87	0.30	100	DMA82	75% COAL, DULL 20% COAL, HEAVY DULL 5% COAL, MID LUSTROUS	BLACK. BLACK. BLACK.
127.26	0.39	100	DMA82	100% COAL, MID LUSTROUS	BLACK.
127.28	0.02	100	DMA82	100% MUDSTONE	GREY.
127.48	0.20	100	DMA82	90% COAL, DULL 5% MUDSTONE 5% COAL, BRIGHT	BLACK. PELLETAL, GREY. BANDS, BLACK.
127.52	0.04	100	DMA82	95% MUDSTONE 5% MUDSTONE	GREY. PELLETAL, GREY.
127.65	0.13	100	DMA82	100% COAL, DULL	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
127.66	0.01	100	DMA82	60% COAL, DULL 40% MUDSTONE	BLACK. BANDS, BROWN-BLACK.
127.78	0.12	100	DMA82	100% COAL, DULL	BLACK.
128.66	0.88	100	DMA82	80% COAL, DULL 10% CARBONACEOUS MUDSTONE 10% MUDSTONE	BLACK. BLACK. BANDS.
128.68	0.02	100	DMA82	100% MUDSTONE	BANDS, GREY.
128.81	0.13	100	DMA82	100% COAL, DULL	BLACK.
128.86	0.05	100	DMA82	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
128.90	0.04	100	DMA82	100% COAL, DULL	BLACK.
128.96	0.06	100	DMA82	100% COAL, INTERBANDED DULL AND BRIGHT	BLACK.
129.00	0.04	100	DMA82	100% COAL, DULL	BLACK.
129.06	0.06	100	DMA82	100% COAL, MID LUSTROUS	BLACK.
129.16	0.10	100	DMA82	60% COAL, DULL WITH NUMEROUS BRIGHT BANDS 20% COAL, BRIGHT 20% COAL, MID LUSTROUS	BLACK. BANDS, BLACK. BLACK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.59 M; SAMPLED THICKNESS= 2.59 M	
250.70	121.54	0		CORE LOSS	

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	1.83 M	124.05 - 125.88 M	1.83 M
L2	2.59 M	126.57 - 129.16 M	2.59 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
DM8A1	124.05 - 125.88 M	1.83 M
DMA82	126.57 - 129.16 M	2.59 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM13

HOLE TYPE	CORE
EASTING	591,971 M AM GRID
NORTHING	5,401,972 M AM GRID
ELEVATION	537.38 M
TOTAL DEPTH DRILLED	228.50 M
DRILLING STARTED	4/11/71
DRILLING TIME	
CORE SIZE	36.5 MM
HOLE SIZE	42.0 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
1.52	1.52	62		100% SOIL	ARGILLACEOUS.
				TOP OF DALMAYNE A : 535.86 M R.L.	
3.04	1.52	62		100% COAL	MODERATELY WEATHERED, SOFT.
5.18	2.14	58		60% COAL 40% CLAY	HIGHLY WEATHERED, SOFT.
7.47	2.29	68		100% COAL	
12.63	5.16	100		100% MUDSTONE	
13.26	0.63	42		100% COAL	NOTE: RECOVERY GREATER THAN DRILL INTERVAL
13.41	0.15	100		100% MUDSTONE	
13.66	0.25	100		100% COAL	
14.48	0.82	100		100% MUDSTONE	
15.24	0.76	100		100% COAL	
				BASE OF DALMAYNE A : THICKNESS= 13.72 M; SAMPLED THICKNESS= 0.00 M	
17.52	2.28	100		70% MUDSTONE 30% COAL	INTERCALATIONS. BANDS.
29.11	11.59	100		100% MUDSTONE	
29.34	0.23	100		100% COAL	
29.85	0.51	100		60% COAL 40% MUDSTONE	INTERCALATIONS. INTERCALATIONS.
30.27	0.42	88		80% SANDSTONE 20% COAL	INTERCALATIONS. BANDS.
30.91	0.64	94		100% MUDSTONE	CARBONACEOUS.
32.97	2.06	93		100% SILTSTONE	BANDS.
34.77	1.80	93		100% SANDSTONE,FINE GRAINED	BANDS.
37.01	2.24	93		100% MUDSTONE	CARBONACEOUS, GREY.
37.03	0.02	100		100% COAL	
37.22	0.19	80		100% SHALE	GREY.
37.95	0.73	80		100% MUDSTONE	CARBONACEOUS.
				TOP OF MT. NICHOLAS UPPER 8 : 499.43 M R.L.	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE ** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
38.15	0.20	80		100% COAL	
38.46	0.31	80		100% SHALE	SANDSTONE.
39.02	0.56	80		70% COAL 30% MUDSTONE	INTERCALATIONS. BANDS.
42.42	3.40	80		95% MUDSTONE 5% COAL	INTERCALATIONS, GREY. BANDS.
42.47	0.05	80		100% MUDSTONE	BANDS, WHITE.
42.82	0.35	80		100% COAL	
43.03	0.21	80		100% MUDSTONE	BANDS, WHITE.
43.13	0.10	80		100% COAL	
43.14	0.01	80		80% COAL 20% MUDSTONE	INTERCALATIONS. BANDS, BUFF. STRONG ROCK.
43.48	0.34	100		100% COAL	
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 5.53 M; SAMPLED THICKNESS= 0.00 M	
51.15	7.67	87		100% SANDSTONE,FINE GRAINED	THINLY BEDDED, WITH CARBONACEOUS WISPS.
63.02	11.87	91		100% SANDSTONE,MEDIUM GRAINED	MED.-COARSE GRAINED, CALCAREOUS, WITH CARBONACEOUS WISPS.
63.76	0.74	99		100% SANDSTONE,COARSE GRAINED	LITHIC.
64.52	0.76	100		100% MUDSTONE	GREY.
65.20	0.68	94		100% SANDSTONE,FINE GRAINED	LITHIC, BANDS.
65.35	0.15	100		100% MUDSTONE	GREY.
66.98	1.63	100		100% SANDSTONE,FINE GRAINED	LITHIC, BANDS, THINLY BEDDED.
67.78	0.80	100		100% MUDSTONE	CARBONACEOUS, GREY.
68.89	1.11	100		100% CLAY	GREY.
69.24	0.35	100		100% COAL	DULL COAL.
69.59	0.35	100		100% SANDSTONE,FINE GRAINED	
70.34	0.75	100		100% MUDSTONE	GREY.
71.25	0.91	100		100% SANDSTONE,FINE GRAINED	
71.66	0.41	100		100% CLAYSTONE	SOFT.
72.66	1.00	100		100% MUDSTONE	GREY.
73.18	0.52	100		100% SANDSTONE,FINE GRAINED	SILTSTONE.
73.84	0.66	100		100% MUDSTONE	GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
		TOP OF MT. NICHOLAS MIDDLE 1 : 463.54 M R.L.			
74.79	0.95	100		100% COAL	
		BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 0.95 M; SAMPLED THICKNESS= 0.00 M			
76.71	1.92	100		100% MUDSTONE	GRADING TO, CARBONACEOUS.
77.04	0.33	93		100% COAL	BRIGHT COAL.
83.79	6.75	93		100% MUDSTONE	GREY.
84.33	0.54	93		100% COAL	
85.50	1.17	93		100% MUDSTONE	GREY. NOTE: SPLIT BX CORE RELOGGED+SAMPLED BY SHELL GEO P.S.
		TOP OF MT. NICHOLAS MIDDLE 2 : 451.88 M R.L.			
85.52	0.02	100	1	50% COAL, DULL 50% MUDSTONE	BLACK. DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK.
85.92	0.40	100	1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
85.96	0.04	100	1	100% MUDSTONE	CARBONACEOUS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
87.08	1.12	100	1	80% COAL, DULL 10% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BLACK. BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
87.33	0.25	100	1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
87.68	0.35	100	1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK. NOTE: SHELL ANALYSIS NUMBER D13A1 ALSO FROM 85.50 TO 87.68M
		BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.18 M; SAMPLED THICKNESS= 2.18 M			
88.47	0.79	100		100% MUDSTONE	GREY.
90.15	1.68	100		100% MUDSTONE	SILTSTONE, BANDS.
91.03	0.88	100		100% SANDSTONE,FINE GRAINED	LITHIC.
95.98	4.95	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC.
100.38	4.40	56		100% MUDSTONE	SILTSTONE, BANDS.
141.69	41.31	92		100% SANDSTONE,MEDIUM GRAINED	LITHIC.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
142.17	0.48	100		100% COAL	
144.01	1.84	100		100% SILTSTONE	
145.43	1.42	100		100% SANDSTONE	LITHIC, GREY.
146.10	0.67	100		100% SILTSTONE	
149.10	3.00	99		100% SANDSTONE,FINE GRAINED	LITHIC.
149.24	0.14	92		100% MUDSTONE	GREY.
150.02	0.78	92		80% SANDSTONE,FINE GRAINED 20% SILTSTONE	INTERCALATIONS. BANDS. NOTE: SPLIT BQ CORE RELOGGED+SAMPLED BY SHELL GEO P.S.
157.20	7.18	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
157.67	0.47	100		100% SANDSTONE,FINE GRAINED	CARBONACEOUS, LAMINAE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
158.80	1.13	100		100% SANDSTONE	MED.-FINE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
159.90	1.10	100		100% SANDSTONE	MED.-COARSE GRAINED, CALCAREOUS, LIGHT GREY, UNWEATHERED, MODERATELY STRONG ROCK.
160.07	0.17	100		50% SANDSTONE,MEDIUM GRAINED 50% CARBONACEOUS MUDSTONE	COALY, FRAGMENTS, LIGHT GREY. LENSES, PELLETAL, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
160.20	0.13	100		100% SANDSTONE	MED.-COARSE GRAINED, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.30	0.10	100		75% SANDSTONE 25% CARBONACEOUS MUDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY. PELLETAL, FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
160.40	0.10	100		100% SANDSTONE	MED.-COARSE GRAINED, MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
160.69	0.29	100		75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	COALY, STREAKS, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODEPATELY WEAK ROCK, WITH MUD PELLETS.
161.65	0.96	100		95% SANDSTONE,MEDIUM GRAINED 5% CARBONACEOUS MUDSTONE	MASSIVE, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
161.74	0.09	100		75% SANDSTONE,MEDIUM GRAINED 25% CARBONACEOUS MUDSTONE	COALY, STREAKS, LIGHT GREY. FRAGMENTS, BROWN-BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
162.65	0.91	100		100% SANDSTONE,MEDIUM GRAINED	MASSIVE, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
				TOP OF MT. NICHOLAS LOWER 2 : 374.73 M R.L.	
162.73	0.08	83	2	100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
162.75	0.02	83	2	100% CARBONACEOUS MUDSTONE	MASSIVE, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
162.81	0.06	83	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
162.82	0.01	83	2	80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CREAM. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
162.91	0.09	83	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
162.96	0.05	83	2	75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
163.06	0.10	83	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.14	0.08	83	2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.15	0.01	83	2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.17	0.02	83	2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.19	0.02	83	2	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.21	0.02	83	2	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.27	0.06	83	2	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
163.44	0.17	83	2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.45	0.01	83	2	100% MUDSTONE	GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
163.60	0.15	83	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.63	0.03	83	2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.78	0.15	83	2	100% COAL, MID LUSTROUS - DULL	BLACK, WITH FRAGMENTS OF PYRITE, UNWEATHERED, MODERATELY WEAK ROCK.
163.79	0.01	83	2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.83	0.04	83	2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
163.87	0.04	83	2	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.03	0.16	83	2	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.04	0.01	83	2	100% MUDSTONE	COALY, STREAKS, BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
164.29	0.25	83	2	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
164.36	0.07	83	2	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.45	0.09	83	2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.52	0.07	83	2	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.69	0.17	83	2	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.70	0.01	83	2	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
				NOTE: DOM ANALYSIS NO 1 FROM 162.65 TO 164.70M	
164.71	0.01	83	3	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.84	0.13	83	3	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
164.88	0.04	83	3	100% MUDSTONE	COALY, STREAKS, GREY-BROWN, UNWEATHERED, MODERATELY WEAK ROCK.
164.91	0.03	83	3	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.21	0.30	83	3	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.24	0.03	83	3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.25	0.01	83	3	50% COAL, BRIGHT 50% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
165.29	0.04	83	3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.36	0.07	83	3	100% TONSTEIN	WHITE, UNWEATHERED, MODERATELY WEAK ROCK.
165.63	0.27	83	3	100% COAL, MID LUSTROUS - DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.82	0.19	83	3	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.89	0.07	83	3	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.96	0.07	83	3	100% COAL, MID LUSTROUS - BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
165.99	0.03	83	3	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
166.02	0.03	83	3	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
166.05	0.03	83	3	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 3.40 M; SAMPLED THICKNESS= 3.40 M	
166.35	0.30	83	3	100% MUDSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS, RAPID SLAKING.
166.36	0.01	83	3	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK, EXTREMELY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
166.65	0.29	83	3	85% MUDSTONE 15% COAL, BRIGHT	SILTSTONE, GREY. FRAGMENTS, LENSES, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, SLOW SLAKING.
				NOTE: DOM ANALYSIS NO 2 FROM 164.87 TO 166.65M	
166.86	0.21	100		100% MUDSTONE	MASSIVE, GREY, UNWEATHERED, MODERATELY WEAK ROCK.
166.93	0.07	100		75% SANDSTONE,FINE GRAINED 25% MUDSTONE	LIGHT GREY. PELLETAL, FRAGMENTS, GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
169.94	3.01	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED, MASSIVE, LIGHT GREY. FRAGMENTS, STREAKS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, WITH CARBONACEOUS WISPS.
179.00	9.06	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT GREY, UNWEATHERED, MODERATELY WEAK ROCK.
179.13	0.13	88		100% MUDSTONE	CARBONACEOUS, COALY.
180.61	1.48	100		80% MUDSTONE 20% SILTSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS.
180.80	0.19	100		100% MUDSTONE	CARBONACEOUS.
181.80	1.00	100	4	100% COAL	
182.63	0.83	100		100% MUDSTONE	
182.93	0.30	100		100% COAL	
183.41	0.48	100		100% MUDSTONE	
185.14	1.73	100		100% MUDSTONE	SILTSTONE, BANDS.
185.64	0.50	100		100% SANDSTONE,FINE GRAINED	BANDS.
185.84	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC.
187.19	1.35	100		100% SILTSTONE	
188.77	1.58	100		100% MUDSTONE	DARK GREY.
189.12	0.35	96		100% COAL	
189.56	0.44	96		100% MUDSTONE	CARBONACEOUS.
190.14	0.58	96		100% SANDSTONE,MEDIUM GRAINED	LITHIC.
196.14	6.00	99		100% SANDSTONE,MEDIUM GRAINED	MED.-COARSE GRAINED, LITHIC.
204.68	8.54	99		100% MUDSTONE	BANDS.
206.30	1.62	100		100% SANDSTONE,FINE GRAINED	LITHIC.
208.66	2.36	100		100% SILTSTONE	BANDS.
218.68	10.02	100		100% SANDSTONE,COARSE GRAINED	MED.-COARSE GRAINED, LITHIC.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
218.99	0.31	92		90% SANDSTONE,COARSE GRAINED 10% MUDSTONE	LITHIC. PELLETAL, DARK GREY.
219.58	0.59	92		100% SANDSTONE,MEDIUM GRAINED	LITHIC, BANDS, WITH CARBONACEOUS WISPS.
219.79	0.21	92		100% SILTSTONE	BANDS.
220.37	0.58	92		100% SANDSTONE,MEDIUM GRAINED	LITHIC.
221.30	0.93	92		100% SILTSTONE	BANDS.
223.50	2.20	92		100% MUDSTONE	DARK GREY.
224.86	1.36	92		100% SILTSTONE	BANDS.
225.23	0.37	92		100% SANDSTONE,FINE GRAINED	BANDS.
228.50	3.27	92		100% SANDSTONE,FINE GRAINED	LITHIC.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
DA	0.00 M	1.52 - 15.24 M	13.72 M
U8	0.00 M	37.95 - 43.48 M	5.53 M
M1	0.00 M	73.84 - 74.79 M	0.95 M
M2	2.18 M	85.50 - 87.68 M	2.18 M
L2	3.40 M	162.65 - 166.05 M	3.40 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	85.50 - 87.68 M	2.18 M
2	162.65 - 164.70 M	2.05 M
3	164.70 - 166.65 M	1.95 M
4	180.80 - 181.80 M	1.00 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM13R

HOLE TYPE	CORE
EASTING	591,971 M AM GRID
NORTHING	5,401,972 M AM GRID
ELEVATION	537.38 M
TOTAL DEPTH DRILLED	228.50 M
DRILLING STARTED	4/11/71
DRILLING TIME	80 DAYS
CORE SIZE	36.5 MM
HOLE SIZE	42.0 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION

PETROPHYSICAL WIRELINE LOGS RUN :

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
85.50	85.50	0		CORE LOSS	
		TOP OF MT. NICHOLAS MIDDLE 2 : 451.88 M R.L.			
85.52	0.02	100	D13A1	50% COAL, DULL 50% MUDSTONE	BLACK. DARK GREY.
85.92	0.40	100	D13A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BLACK.
85.96	0.04	100	D13A1	100% MUDSTONE	CARBONACEOUS, BLACK.
87.08	1.12	100	D13A1	80% COAL, DULL 10% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BLACK. BLACK. BLACK.
87.33	0.25	100	D13A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK.
87.68	0.35	100	D13A1	100% COAL, DULL	BLACK.
		BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 2.18 M; SAMPLED THICKNESS= 2.18 M			
162.65	74.97	0		CORE LOSS	
		TOP OF MT. NICHOLAS LOWER 2 : 374.73 M R.L.			
162.73	0.08	83	D13A2	100% SILTSTONE	CARBONACEOUS, ARENACEOUS, DARK GREY.
162.75	0.02	83	D13A2	100% CARBONACEOUS MUDSTONE	MASSIVE, DARK GREY.
162.81	0.06	83	D13A2	100% COAL, MID LUSTROUS	BLACK.
162.82	0.01	83	D13A2	80% MUDSTONE 20% CARBONACEOUS MUDSTONE	CREAM. BANDS, BLACK.
162.91	0.09	83	D13A3	100% COAL, MID LUSTROUS	BLACK.
162.96	0.05	83	D13A3	75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BLACK. BLACK.
163.06	0.10	83	D13A3	100% COAL, MID LUSTROUS	BLACK.
163.14	0.08	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
163.15	0.01	83	D13A3	100% CARBONACEOUS MUDSTONE	BLACK.
163.17	0.02	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
163.19	0.02	83	D13A3	100% CARBONACEOUS MUDSTONE	BLACK.
163.21	0.02	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
163.27	0.06	83	D13A3	100% MUDSTONE	GREY-BROWN.
163.44	0.17	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
163.45	0.01	83	D13A3	100% MUDSTONE	GREY-BROWN.
163.60	0.15	83	D13A3	100% COAL, MID LUSTROUS	BLACK.
163.63	0.03	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK.
163.78	0.15	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.
163.79	0.01	83	D13A3	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK.
163.83	0.04	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.
163.87	0.04	83	D13A3	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK.
164.03	0.16	83	D13A3	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, STREAKS, BLACK.
164.04	0.01	83	D13A3	100% MUDSTONE	COALY, STREAKS, BROWN.
164.29	0.25	83	D13A3	100% COAL, MID LUSTROUS	BLACK.
164.36	0.07	83	D13A3	100% COAL, BRIGHT WITH NUMEROUS DULL BANDS	BLACK.
164.45	0.09	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.
164.52	0.07	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BRIGHT COAL, BANDS, BLACK.
164.69	0.17	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.
164.70	0.01	83	D13A3	100% TONSTEIN	WHITE.
164.71	0.01	83	D13A3	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
164.84	0.13	83	D13A3	100% COAL, MID LUSTROUS	BLACK.
164.88	0.04	83	D13A3	100% MUDSTONE	COALY, STREAKS, GREY-BROWN.
164.91	0.03	83	D13A3	100% COAL, MID LUSTROUS	BRIGHT COAL, BANDS, BLACK.
165.21	0.30	83	D13A3	100% COAL, MID LUSTROUS - DULL	BRIGHT COAL, BANDS, BLACK.
165.24	0.03	83	D13A3	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK.
165.25	0.01	83	D13A3	50% COAL, BRIGHT 50% COAL, DULL	BLACK. BLACK.
165.29	0.04	83	D13A3	100% COAL, MID LUSTROUS - DULL	BLACK.
165.36	0.07	100	D13A4	100% TONSTEIN	WHITE.
165.63	0.27	100	D13A4	100% COAL, MID LUSTROUS - DULL	BLACK.
165.82	0.19	100	D13A4	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
165.89	0.07	100	D13A4	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK.
165.96	0.07	100	D13A4	100% COAL, MID LUSTROUS - BRIGHT	BLACK.
165.99	0.03	100	D13A4	100% COAL, MID LUSTROUS	BLACK.
166.02	0.03	100	D13A4	100% COAL, BRIGHT WITH FEW DULL BANDS	BLACK.
166.05	0.03	100	D13A4	100% CARBONACEOUS MUDSTONE	BLACK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE	GEOLOGICAL DESCRIPTION *** CORE DESCRIPTION ***
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 3.40 M; SAMPLED THICKNESS= 3.40 M	
228.50	62.45	0		CORE LOSS	

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
M2	2.18 M	85.50 - 87.68 M	2.18 M
L2	3.40 M	162.65 - 166.05 M	3.40 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
D13A1	85.50 - 87.68 M	2.18 M
D13A2	162.65 - 162.82 M	0.17 M
D13A3	162.82 - 165.29 M	2.47 M
D13A4	165.29 - 166.05 M	0.76 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM33

HOLE TYPE	CORE
EASTING	593,770 M AM GRID
NORTHING	5,398,700 M AM GRID
ELEVATION	509.30 M
TOTAL DEPTH DRILLED	199.56 M
DRILLING STARTED	13/ 6/70
DRILLING TIME	90 DAYS
CORE SIZE	47.6 MM
HOLE SIZE	75.8 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
15.62	15.62	30		100% DOLERITE	SCREE.
15.84	0.22	100		80% MUDSTONE 15% MUDSTONE 5% COAL	FOSSILIFERROUS, BROWN. CARBONACEOUS, INTERCALATIONS. BRIGHT COAL, BANDS. HIGHLY WEATHERED.
				TOP OF MT. NICHOLAS UPPER 8 : 493.46 M R.L.	
15.90	0.06	100		100% COAL	DULL COAL.
15.93	0.03	100		100% MUDSTONE	BANDS, BROWN.
15.99	0.06	100		100% COAL	DULL COAL.
16.04	0.05	100		100% SANDSTONE,FINE GRAINED	LITHIC, BROWN.
16.59	0.55	100		90% COAL, DULL 10% SANDSTONE	LAMINAE, BANDS. WITH MINOR PYRITE, WITH MUD PELLETS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG., WITH SLICKENSIDES.
				BASE OF MT. NICHOLAS UPPER 8 : THICKNESS= 0.75 M; SAMPLED THICKNESS= 0.00 M	
17.09	0.50	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN, THICKLY BEDDED, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
18.29	1.20	100		100% SHALE	FOSSILIFERROUS, GREY.
18.96	0.67	100		100% SILTSTONE	GREY.
18.98	0.02	100		50% MUDSTONE 50% MUDSTONE	CARBONACEOUS.
20.10	1.12	100		70% SILTSTONE 30% SANDSTONE,FINE GRAINED	INTERCALATIONS, LAMINAE. LAMINAE. WITH TROUGH CROSS BEDDING.
20.21	0.11	100		100% MUDSTONE	BADLY BROKEN, BROWN, WITH TRACE FOSSILS, WITH PLANT REMAINS.
21.14	0.93	61		95% MUDSTONE 5% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS, RED-BROWN. BANDS, LITHIC. MODERATELY WEATHERED.
22.59	1.45	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LITHIC, BROWN. BANDS. HIGHLY WEATHERED.
29.20	6.61	91		95% SANDSTONE,MEDIUM GRAINED 5% PEBBLE CONGLOMERATE	LITHIC. MUDSTONE, QUARTZOSE. WITH ROUNDED QUARTZ, BEDS DIP 15 DEG., JOINTS DIP 85 DEG., HIGH PERMIABILITY.
32.20	3.00	99		100% MUDSTONE	LITHIC, FOSSILIFERROUS, BEDS DIP 20 DEG.
34.73	2.53	95		95% SANDSTONE,FINE GRAINED 5% COAL	MED.-FINE GRAINED. LUSTROUS, FOSSILIFERROUS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
36.41	1.68	100		95% SANDSTONE,MEDIUM GRAINED 5% SANDSTONE,MEDIUM GRAINED	MED.-FINE GRAINED, LITHIC. CARBONACEOUS, BANDS. WITH MUD PELLETS.
36.43	0.02	100		100% COAL	BANDS, BEDS DIP 20 DEG.
36.52	0.09	100		100% MUDSTONE	CARBONACEOUS, BADLY BROKEN.
37.70	1.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, THICKLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
38.08	0.38	100		100% MUDSTONE	CARBONACEOUS, WITH CRYSTALLINE CALCITE.
43.27	5.19	100		100% SANDSTONE	FINE GRAINED, LITHIC, THICKLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
				TOP OF MT. NICHOLAS MIDDLE 1 : 466.03 M R.L.	
43.70	0.43	100	1	100% COAL	DULL COAL.
43.71	0.01	100	1	100% MUDSTONE	BANDS.
44.20	0.49	100	1	100% COAL	DULL COAL.
44.25	0.05	100		100% MUDSTONE	CARBONACEOUS.
44.36	0.11	100		100% MUDSTONE	GREY, MODERATELY STRONG ROCK.
44.44	0.08	100		100% CLAY	CREAM, VERY SOFT, VERY STICKY.
44.62	0.18	100	2	100% COAL	DULL COAL.
44.67	0.05	100		100% MUDSTONE	BANDS, BROWN.
45.19	0.52	100	2	100% COAL	DULL COAL.
45.25	0.06	100		100% MUDSTONE	ARGILLACEOUS, BANDS.
45.51	0.26	100	3	100% COAL, DULL	
45.55	0.04	100		100% SANDSTONE,MEDIUM GRAINED	SILTSTONE, LITHIC, THICKLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
45.58	0.03	100	3	100% COAL, DULL	
46.29	0.71	100	3	100% COAL, HEAVY DULL	
46.39	0.10	100		100% CARBONACEOUS SHALE	GREEN.
46.56	0.17	100	4	100% COAL, DULL	
46.59	0.03	100		100% CARBONACEOUS SHALE	BANDS.
46.65	0.06	100	4	100% COAL, HEAVY DULL	
46.73	0.08	100	5	100% COAL, DULL	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.75	0.02	100		100% CARBONACEOUS SHALE	BANDS.
46.83	0.08	100	5	100% COAL, DULL	
46.84	0.01	100		100% CARBONACEOUS SHALE	BANDS.
47.20	0.36	100	5	100% COAL, DULL	
47.78	0.58	100	6	100% COAL, DULL	
47.82	0.04	100		100% MUDSTONE	CARBONACEOUS.
47.89	0.07	100		100% MUDSTONE	GREY, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
47.97	0.08	100	7	100% COAL, DULL	
48.03	0.06	100		100% MUDSTONE	GREY.
48.15	0.12	100	7	100% COAL	DULL COAL.
48.16	0.01	100		100% CARBONACEOUS SHALE	PYRITIC, BANDS, GREY-BROWN.
48.48	0.32	100	7	100% COAL	DULL COAL.
				BASE OF MT. NICHOLAS MIDDLE 1 : THICKNESS= 5.21 M; SAMPLED THICKNESS= 4.48 M	
48.90	0.42	100		100% SHALE	FIRM.
50.01	1.11	100		90% MUDSTONE 10% MUDSTONE	SILTY, LAMINAE, BLUE-GREY. CARBONACEOUS, INTERCALATIONS. THINLY BEDDED.
50.08	0.07	100		100% COAL, DULL	
50.09	0.01	90		100% SILTSTONE	BANDS, CREAM.
50.16	0.07	100		100% COAL	DULL COAL.
50.96	0.80	80		100% MUDSTONE	FOSSILIFERROUS, CARBONACEOUS, GREY, THICKLY BEDDED, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
51.20	0.24	95		100% COAL, DULL	
51.41	0.21	90		100% MUDSTONE	GREY.
51.44	0.03	100		100% MUDSTONE	CALCAREOUS, BANDS, WHITE.
51.46	0.02	100		100% COAL, DULL WITH FEW BRIGHT BANDS	
52.50	1.04	81		100% MUDSTONE	MODERATELY STRONG ROCK, VERY THINLY BEDDED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
53.20	0.70	79		80% MUDSTONE 20% SANDSTONE	INTERCALATIONS. LITHIC, BANDS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
53.75	0.55	100		100% MUDSTONE	FOSSILIFERROUS, GREY, THICKLY LAMINATED, SEPARATION ALONG SOME BEDDING SURFACES, WITH CARBONACEOUS WISPS, WITH PARTING LINEATION.
				TOP OF MT. NICHOLAS MIDDLE 2 : 455.55 M R.L.	
53.93	0.18	100		100% COAL, DULL	
54.35	0.42	100		90% MUDSTONE 10% MUDSTONE	CARBONACEOUS. BANDS, GREY. THINLY BEDDED.
55.41	1.06	100	8	100% COAL	DULL COAL.
55.45	0.04	100		100% SANDSTONE	ARENACEOUS, LITHIC.
55.47	0.02	100		50% CARBONACEOUS MUDSTONE 50% COAL	 DULL COAL.
55.53	0.06	100		100% SHALE	BANDS, LIGHT GREY.
55.55	0.02	100		100% SILTSTONE	CARBONACEOUS, PARTINGS.
55.57	0.02	100		100% COAL	DULL COAL.
55.66	0.09	100		100% CARBONACEOUS MUDSTONE	LAMINAE.
56.20	0.54	100	9	100% COAL	DULL COAL.
56.98	0.78	100	10	100% COAL	DULL COAL.
				BASE OF MT. NICHOLAS MIDDLE 2 : THICKNESS= 3.23 M; SAMPLED THICKNESS= 2.38 M	
57.10	0.12	100		80% CARBONACEOUS MUDSTONE 20% MUDSTONE	INTERCALATIONS. BANDS, BROWN.
57.25	0.15	100		100% MUDSTONE	LIGHT BROWN, THINLY BEDDED.
57.33	0.08	100		100% SILTSTONE	BROWN, THINLY BEDDED.
58.16	0.83	100		100% SANDSTONE,FINE GRAINED	LITHIC, THINLY BEDDED.
59.11	0.95	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, THINLY BEDDED.
59.71	0.60	100		97% SANDSTONE,MEDIUM GRAINED 3% MUDSTONE	LITHIC, INTERCALATIONS. PELLETAL.
60.85	1.14	100		100% SANDSTONE,FINE GRAINED	LITHIC, ORANGE-BROWN, STRONG ROCK, THINLY BEDDED.
62.91	2.06	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, INTERCALATIONS, THINLY BEDDED, WITH CARBONACEOUS WISPS.
65.20	2.29	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, WITH PLANT REMAINS.
73.22	8.02	100		90% SANDSTONE,MEDIUM GRAINED 10% SANDSTONE	LITHIC, INTERCALATIONS. MED.-FINE GRAINED, BANDS. WITH PYRITE, THINLY BEDDED.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
73.27	0.05	100		100% COAL	DULL COAL.
73.44	0.17	100		100% CARBONACEOUS MUDSTONE	
				TOP OF MT. NICHOLAS MIDDLE 3 : 435.86 M R.L.	
74.30	0.86	100	11	100% COAL, DULL	
74.42	0.12	100		60% CARBONACEOUS MUDSTONE 40% MUDSTONE	
74.56	0.14	100	12	100% COAL	DULL COAL.
74.57	0.01	100		100% MUDSTONE	BANDS.
75.46	0.89	100	12	100% COAL	DULL COAL.
76.46	1.00	100	13	100% COAL	DULL COAL.
				BASE OF MT. NICHOLAS MIDDLE 3 : THICKNESS= 3.02 M; SAMPLED THICKNESS= 2.89 M	
76.68	0.22	100		50% CARBONACEOUS MUDSTONE 50% MUDSTONE	
76.89	0.21	71		70% MUDSTONE 30% CARBONACEOUS MUDSTONE	LAMINAE, INTERCALATIONS, GREY. LAMINAE, INTERCALATIONS.
77.20	0.31	71		90% CARBONACEOUS MUDSTONE 10% COAL	DULL COAL, LENSES. WITH LAMINAE OF KAOLINITE, THINLY BEDDED, BEDS DIP 2 DEG., WITH FLAME/PULL STRUCTS.
77.23	0.03	100		100% CARBONACEOUS MUDSTONE	STRONG ROCK. NOTE: MAY HAVE FALLEN DOWN BOREHOLE
77.82	0.59	80		100% MUDSTONE	GREY, WITH CARBONACEOUS WISPS.
79.00	1.18	90		100% MUDSTONE	GREY, THINLY BEDDED, WITH PLANT REMAINS, WITH CARBONACEOUS WISPS.
79.23	0.23	74		100% SHALE	GREY, THINLY BEDDED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
80.15	0.92	97		100% MUDSTONE	GREY, THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
80.18	0.03	100		75% CARBONACEOUS MUDSTONE 25% COAL	INTERCALATIONS. LENSES. THINLY BEDDED.
80.22	0.04	100		100% COAL	DULL COAL, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG.
80.29	0.07	100		100% CARBONACEOUS MUDSTONE	THINLY BEDDED.
80.34	0.05	100		100% COAL	DULL COAL, THINLY BEDDED.
80.47	0.13	100		100% MUDSTONE	GREY, THINLY BEDDED, WITH PLANT REMAINS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
80.53	0.06	100		100% SILTSTONE	GREY, THINLY BEDDED.
80.73	0.20	100		100% SANDSTONE,FINE GRAINED	LITHIC, THINLY BEDDED.
80.94	0.21	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC.
81.14	0.20	100		100% SANDSTONE,FINE GRAINED	LITHIC, THINLY BEDDED, WITH CARBONACEOUS WISPS, WITH PLANT REMAINS.
81.41	0.27	100		100% MUDSTONE	GREY, WITH CARBONACEOUS WISPS.
81.48	0.07	100		100% SANDSTONE,FINE GRAINED	LITHIC, LAMINAE, GREY, WITH CARBONACEOUS WISPS.
81.53	0.05	100		100% SILTSTONE	GREY, THINLY BEDDED, BEDS DIP 1 DEG.
81.68	0.15	93		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, THINLY BEDDED.
81.74	0.06	100		100% SILTSTONE	GREY, THINLY BEDDED.
81.98	0.24	96		100% SHALE	GREY, THINLY BEDDED.
82.40	0.42	95		50% SILTSTONE 50% MUDSTONE	LAMINAE, INTERCALATIONS. LAMINAE, INTERCALATIONS. THINLY BEDDED, WITH PLANT REMAINS.
82.57	0.17	94		100% MUDSTONE	GREY, THINLY BEDDED, WITH PLANT REMAINS.
82.73	0.16	94		100% CARBONACEOUS MUDSTONE	THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
82.82	0.09	78		100% SHALE	GREY-BROWN, THINLY BEDDED.
83.04	0.22	94		95% COAL 5% COAL	DULL COAL. BRIGHT COAL.
83.05	0.01	94		100% MUDSTONE	BANDS.
83.17	0.12	94		95% COAL 5% COAL	DULL COAL. BRIGHT COAL.
83.18	0.01	94		100% MUDSTONE	BANDS.
83.36	0.18	94		95% COAL 5% COAL	DULL COAL. BRIGHT COAL. THINLY BEDDED.
83.59	0.23	52		100% SHALE	GREY.
86.09	2.50	98		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, MEDIUM BEDDED, BASAL CONTACT TRANSITIONAL, BEDS DIP 15 DEG., WITH CARBONACEOUS WISPS, WITH CONVOLUTED BEDDING.
90.45	4.36	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, THINLY BEDDED.
90.56	0.11	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, THINLY LAMINATED, WITH CARBONACEOUS WISPS.
96.21	5.65	100		100% MUDSTONE	CONGLOMERATIC, PELLETAL, THINLY BEDDED, VERY WIDELY SPACED JOINTS, JOINTS DIP 45 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
101.83	5.62	100		90% SANDSTONE,MEDIUM GRAINED 10% SHALE	LITHIC, PELLETAL. LENSES. BEDS DIP 20 DEG., WITH PLANT REMAINS, WITH CONVOLUTED BEDDING.
102.31	0.48	63		100% SANDSTONE,MEDIUM GRAINED	LITHIC, LIGHT BROWN, STRONG ROCK, THINLY BEDDED.
105.92	3.61	100		88% SANDSTONE,MEDIUM GRAINED 10% MUDSTONE 2% COAL	LITHIC, MED.-FINE GRAINED. CONGLOMERATIC, PELLETAL. BANDS. WITH CARBONACEOUS WISPS.
106.04	0.12	100		100% MUDSTONE	CARBONACEOUS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG.
106.27	0.23	100		100% MUDSTONE	BROWN, STRONG ROCK, THINLY BEDDED, WITH PLANT REMAINS, CLOSELY SPACED JOINTS, JOINTS DIP 45 DEG.
107.16	0.89	100		100% MUDSTONE	GREY, THINLY BEDDED, BEDS DIP 20 DEG., WITH PLANT REMAINS, EXTREMELY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 47 DEG.
112.43	5.27	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, THINLY BEDDED, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS.
112.46	0.03	100		100% COAL	DULL COAL.
112.47	0.01	100		100% CLAYSTONE	BROWN, VERY STICKY.
112.49	0.02	100		100% COAL	DULL COAL, BADLY BROKEN, THINLY BEDDED.
112.61	0.12	100		100% CARBONACEOUS MUDSTONE	
114.06	1.45	100		50% CARBONACEOUS MUDSTONE 50% SANDSTONE	LAMINAE. MED.-FINE GRAINED, LITHIC. THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG.
114.82	0.76	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, WITH CARBONACEOUS WISPS.
114.96	0.14	100		100% COAL, DULL	CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG.
115.05	0.09	100		100% SHALE	DARK GREY, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
115.16	0.11	100		100% SHALE	NOTE: WATER SATURATED
115.23	0.07	100		100% COAL, DULL	CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
115.32	0.09	100		100% CARBONACEOUS MUDSTONE	JOINTS DIP 20 DEG.
115.82	0.50	100		100% SHALE	FOSSILIFERROUS, THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG.
116.12	0.30	100		100% SILTSTONE	CALCAREOUS, STRONG ROCK.
116.80	0.68	100		100% SILTSTONE	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
119.19	2.39	100		90% MUDSTONE 10% CARBONACEOUS MUDSTONE	GREY. BANDS, FOSSILIFERROUS. VERY WIDELY SPACED JOINTS, JOINTS DIP 45 DEG.
119.29	0.10	100		100% CARBONACEOUS MUDSTONE	WITH PYRITE, THINLY BEDDED. NOTE: BQ CORE RELOGGED AND SAMPLED BY SHELL GEO P.S.
				TOP OF MT. NICHOLAS LOWER 1 : 390.01 M R.L.	
119.38	0.09	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.42	0.04	100	D33A1	100% COAL, MID LUSTROUS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.47	0.05	100	D33A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.49	0.02	100	D33A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.55	0.06	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.60	0.05	100	D33A1	75% COAL, DULL 25% MUDSTONE	BLACK. BANDS, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
119.62	0.02	100	D33A1	100% CARBONACEOUS MUDSTONE	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.64	0.02	100	D33A1	80% CARBONACEOUS MUDSTONE 20% CARBONACEOUS MUDSTONE	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
119.66	0.02	100	D33A1	60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
119.69	0.03	100	D33A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.94	0.25	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
119.99	0.05	100	D33A1	75% CARBONACEOUS MUDSTONE 15% COAL, HEAVY DULL 10% MUDSTONE	BLACK. BLACK. PELLETAL, WHITE. UNWEATHERED, MODERATELY WEAK ROCK.
120.06	0.07	100	D33A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
120.09	0.03	100	D33A1	95% MUDSTONE 5% COAL, DULL	COALY, STREAKS, CREAM. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
120.12	0.03	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.13	0.01	100	D33A1	60% MUDSTONE 40% COAL, DULL	BANDS, CREAM. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
120.22	0.09	100	D33A1	95% COAL, DULL 5% COAL, BRIGHT	BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK, VERY CLOSELY SPACED JOINTS, JOINTS DIP 90 DEG., TIGHT, PLANAR, SMOOTH DISCONTINUITIES, INFILLED WITH CALCITE.
120.23	0.01	100	D33A1	60% CARBONACEOUS MUDSTONE 40% COAL, DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
120.24	0.01	100	D33A1	100% CARBONACEOUS MUDSTONE	COALY, STREAKS, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.29	0.05	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.31	0.02	100	D33A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.32	0.01	100	D33A1	90% CARBONACEOUS MUDSTONE 10% COAL, BRIGHT	BROWN. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
120.33	0.01	100	D33A1	75% CARBONACEOUS MUDSTONE 25% MUDSTONE	BLACK. BANDS, DARK GREY. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
120.40	0.07	100	D33A1	75% COAL, HEAVY DULL 25% CARBONACEOUS MUDSTONE	BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
120.47	0.07	100	D33A1	100% COAL, DULL	UNWEATHERED, MODERATELY WEAK ROCK.
120.52	0.05	100	D33A1	80% COAL, MID LUSTROUS 20% MUDSTONE	BRIGHT COAL, BANDS, BLACK. LENSES. UNWEATHERED, MODERATELY WEAK ROCK, WITH MUD PELLETS.
120.55	0.03	100	D33A1	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.57	0.02	100	D33A1	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
120.59	0.02	100	D33A1	100% MUDSTONE	LIGHT BROWN, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
120.62	0.03	100	D33A1	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 1.33 M; SAMPLED THICKNESS= 1.33 M	
121.39	0.77	100		100% SILTSTONE	GREY, UNWEATHERED, MODERATELY WEAK ROCK, THINLY BEDDED.
122.53	1.14	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, THINLY BEDDED, WITH CARBONACEOUS WISPS.
122.93	0.40	100		100% MUDSTONE	GREY, THINLY BEDDED.
				TOP OF MT. NICHOLAS LOWER 2 : 386.37 M R.L.	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
122.96	0.05	100	D33A2	100% MUDSTONE	CARBONACEOUS, GREY, UNWEATHERED, MODERATELY WEAK ROCK, WITH PLANT REMAINS.
123.18	0.20	100	D33A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.21	0.03	100	D33A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.24	0.03	100	D33A2	60% CARBONACEOUS MUDSTONE 40% COAL, HEAVY DULL	BLACK. BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
123.64	0.40	100	D33A2	75% COAL, DULL 25% CARBONACEOUS MUDSTONE	BADLY BROKEN, BLACK. BADLY BROKEN, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
123.72	0.08	100	D33A2	90% MUDSTONE 10% MUDSTONE	CREAM. CARBONACEOUS, DARK GREY. UNWEATHERED, MODERATELY STRONG ROCK.
123.85	0.13	100	D33A2	100% COAL, DULL	GRADING TO, HEAVY DULL COAL, BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.90	0.05	100	D33A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
123.92	0.02	100	D33A2	100% COAL, BRIGHT	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.04	0.12	100	D33A2	100% COAL, DULL	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
124.10	0.06	100	D33A2	100% MUDSTONE	CARBONACEOUS, DARK GREY, UNWEATHERED, MODERATELY WEAK ROCK.
124.40	0.30	100	D33A2	90% COAL, DULL 10% COAL, BRIGHT	BADLY BROKEN, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.82	0.42	100	D33A2	95% COAL, DULL 5% COAL, BRIGHT	MUDSTONE, PELLETAL, BLACK. BANDS, BLACK. UNWEATHERED, MODERATELY WEAK ROCK.
124.94	0.12	100	D33A2	100% COAL, DULL WITH NUMEROUS BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
125.00	0.06	100	D33A2	100% COAL, DULL WITH FEW BRIGHT BANDS	BLACK, UNWEATHERED, MODERATELY WEAK ROCK.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 2.07 M; SAMPLED THICKNESS= 2.07 M	
126.00	1.00	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC.
126.09	0.09	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, THICKLY LAMINATED, BASAL CONTACT TRANSITIONAL, BEDS DIP 20 DEG., WITH CARBONACEOUS WISPS.
126.48	0.39	100		50% SILTSTONE 50% MUDSTONE	LAMINAE. LAMINAE.
127.16	0.68	100		100% MUDSTONE	WITH CARBONACEOUS WISPS.
127.43	0.27	100		100% SILTSTONE	FOSSILIFERROUS, THINLY BEDDED.
128.33	0.90	100		100% MUDSTONE	GREY, WITH CARBONACEOUS WISPS, VERY WIDELY SPACED JOINTS, JOINTS DIP 60 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
130.16	1.83	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC.
130.93	0.77	100		90% MUDSTONE 10% MUDSTONE	FOSSILIFERROUS. CALCAREOUS, LENSES. THINLY BEDDED, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
131.40	0.47	100		100% SANDSTONE,FINE GRAINED	LITHIC, THINLY BEDDED.
131.96	0.56	100		100% MUDSTONE	FOSSILIFERROUS, THINLY BEDDED.
132.97	1.01	100		100% COAL	DULL COAL, THINLY BEDDED.
133.28	0.31	100		100% SILTSTONE	MICACEOUS, GREEN-BROWN, WITH MUSCOVITE, THINLY BEDDED.
134.42	1.14	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC.
139.83	5.41	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LITHIC. PELLETAL. WITH CARBONACEOUS WISPS.
140.09	0.26	100		100% CARBONACEOUS MUDSTONE	THINLY BEDDED.
140.13	0.04	100		100% MUDSTONE	
140.38	0.25	100		100% SILTSTONE	GREY-BROWN, THINLY BEDDED.
141.18	0.80	100		100% SILTSTONE	CARBONACEOUS, THINLY BEDDED.
141.44	0.26	100		100% COAL	DULL COAL, THINLY BEDDED.
142.07	0.63	100		100% CARBONACEOUS MUDSTONE	WITH PLANT REMAINS.
142.16	0.09	100		100% CLAYSTONE	BANDS, VERY STICKY.
143.06	0.90	100		100% COAL	DULL COAL.
143.07	0.01	100		100% MUDSTONE	BANDS.
143.76	0.69	100		100% COAL	DULL COAL, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 10 DEG.
143.81	0.05	100		100% CARBONACEOUS MUDSTONE	VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
146.02	2.21	100		100% MUDSTONE	GRADING TO, SILTSTONE, GREY-BROWN.
146.21	0.19	100		50% SILTSTONE 50% SANDSTONE	INTERCALATIONS. MED.-FINE GRAINED, LITHIC.
148.12	1.91	100		100% SANDSTONE	MED.-FINE GRAINED, LITHIC, VERY THINLY BEDDED, BEDS DIP 20 DEG., WITH CONVOLUTED BEDDING.
148.35	0.23	100		50% SILTSTONE 50% SANDSTONE	LAMINAE. MED.-FINE GRAINED, LITHIC. VERY THINLY BEDDED, BEDS DIP 10 DEG., WITH CONVOLUTED BEDDING.
149.30	0.95	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
149.84	0.54	100		60% SANDSTONE,FINE GRAINED 40% SILTSTONE	LITHIC, LAMINAE. LAMINAE. THINLY BEDDED.
150.54	0.70	100		100% MUDSTONE	GREY, THINLY BEDDED.
151.12	0.58	100		80% COAL 20% CARBONACEOUS MUDSTONE	DULL COAL.
151.16	0.04	100		100% CARBONACEOUS MUDSTONE	
151.84	0.68	100		60% CARBONACEOUS MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	LAMINAE. LITHIC, LAMINAE. THINLY BEDDED.
167.61	15.77	100		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LITHIC. PELLETAL, BANDS. BEDS DIP 45 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
168.18	0.57	100		100% SANDSTONE	MED.-FINE GRAINED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
168.80	0.62	100		100% SANDSTONE,MEDIUM GRAINED	COALY, FRAGMENTS.
172.09	3.29	100		95% SANDSTONE 5% COAL	MED.-FINE GRAINED. FRAGMENTS. BEDS DIP 30 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
174.84	2.75	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	FOSSILIFERROUS. FRAGMENTS, LENSES. WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
183.02	8.18	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,FINE GRAINED	LITHIC, FOSSILIFERROUS. LITHIC, LAMINAE. THINLY LAMINATED, BASAL CONTACT TRANSITIONAL, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
187.56	4.54	100		90% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 5% COAL	PELLETAL, BANDS. FRAGMENTS, LENSES. WITH PLANT REMAINS.
188.24	0.68	100		50% SANDSTONE,FINE GRAINED 50% SANDSTONE,MEDIUM GRAINED	LITHIC, LAMINAE. LITHIC, LAMINAE. THINLY LAMINATED, WITH CARBONACEOUS WISPS, WITH CROSS LAMINATION.
188.73	0.49	100		90% SANDSTONE,COARSE GRAINED 10% MUDSTONE	LITHIC. PELLETAL, BANDS. THINLY BEDDED.
190.56	1.83	100		50% SANDSTONE 50% SANDSTONE	MED.-FINE GRAINED, QUARTZOSE. MED.-FINE GRAINED, LITHIC. THINLY BEDDED, WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
195.12	4.56	100		90% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE 5% COAL	LITHIC. CONGLOMERATIC, PELLETAL. FRAGMENTS, LENSES. WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
196.44	1.32	100		100% SANDSTONE	MED.-FINE GRAINED, CALCAREOUS, THINLY BEDDED.
196.71	0.27	100		100% SANDSTONE,FINE GRAINED	QUARTZOSE, THINLY BEDDED.
196.92	0.21	100		100% MUDSTONE	CONGLOMERATIC, PELLETAL.
198.34	1.42	100		98% SANDSTONE,MEDIUM GRAINED 2% SILTSTONE	LITHIC. LENSES, CALCAREOUS. THINLY LAMINATED, WITH SLUMP STRUCTURES.
199.56	1.22	100		100% SILTSTONE	GREY, WITH ANGULAR QUARTZ.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
U8	0.00 M	15.84 - 16.59 M	0.75 M
M1	4.48 M	43.27 - 48.48 M	5.21 M
M2	2.38 M	53.75 - 56.98 M	3.23 M
M3	2.89 M	73.44 - 76.46 M	3.02 M
L1	1.33 M	119.29 - 120.62 M	1.33 M
L2	2.07 M	122.93 - 125.00 M	2.07 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	43.27 - 44.20 M	0.93 M
2	44.44 - 44.62 M	0.18 M
2	44.67 - 45.19 M	0.52 M
3	45.25 - 45.51 M	0.26 M
3	45.55 - 46.29 M	0.74 M
4	46.39 - 46.56 M	0.17 M
4	46.59 - 46.65 M	0.06 M
5	46.65 - 46.73 M	0.08 M
5	46.75 - 46.83 M	0.08 M
5	46.84 - 47.20 M	0.36 M
6	47.20 - 47.78 M	0.58 M
7	47.89 - 47.97 M	0.08 M
7	48.03 - 48.15 M	0.12 M
7	48.16 - 48.48 M	0.32 M
8	54.35 - 55.41 M	1.06 M
9	55.66 - 56.20 M	0.54 M
10	56.20 - 56.98 M	0.78 M
11	73.44 - 74.30 M	0.86 M
12	74.42 - 74.56 M	0.14 M
12	74.57 - 75.46 M	0.89 M
13	75.46 - 76.46 M	1.00 M
D33A1	119.29 - 120.62 M	1.33 M
D33A2	122.93 - 125.00 M	2.07 M

THE SHELL COMPANY OF AUSTRALIA LTD.

BOREHOLE LITHOLOGICAL DESCRIPTION

GRAY

DOM36

HOLE TYPE	CORE
EASTING	594,047 M AM GRID
NORTHING	5,398,508 M AM GRID
ELEVATION	436.20 M
TOTAL DEPTH DRILLED	113.26 M
DRILLING STARTED	28/ 9/70
DRILLING TIME	60 DAYS
CORE SIZE	47.6 MM
HOLE SIZE	75.8 MM
LENGTH CASED	
INITIAL WATER LEVEL	
WATER LEVEL AT GEOPHYSICAL LOGGING	
DRILLING FLUID	
DRILLING CONTRACTOR	
GEOPHYSICAL LOGGING CONTRACTOR	
LITHOLOGICAL DESCRIPTION BY	
INFORMATION AVAILABLE :	SAMPLES TAKEN ANALYTICAL DATA LITHOLOGICAL DESCRIPTION
PETROPHYSICAL WIRELINE LOGS RUN :	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
11.50	11.50	51		100% DOLERITE	SCREE.
12.04	0.54	100		50% CLAY 50% SAND	
13.42	1.38	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, ORANGE-BROWN, HIGHLY WEATHERED.
16.74	3.32	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC, GREY. FRAGMENTS, LENSES. MODERATELY SPACED JOINTS, JOINTS DIP 45 DEG.
21.00	4.26	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, ORANGE-BROWN, HIGHLY WEATHERED.
21.87	0.87	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, BADLY BROKEN, ORANGE-BROWN, HIGHLY WEATHERED, VERY CLOSELY SPACED JOINTS.
23.77	1.90	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC, ORANGE-BROWN. FRAGMENTS, LENSES. HIGHLY WEATHERED.
24.74	0.97	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC, BADLY BROKEN, ORANGE-BROWN. FRAGMENTS, LENSES. HIGHLY WEATHERED, WITH CROSS LAMINATION, VERY CLOSELY SPACED JOINTS.
24.84	0.10	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, ORANGE-BROWN, HIGHLY WEATHERED, WITH CARBONACEOUS WISPS.
25.04	0.20	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, ORANGE-BROWN, HIGHLY WEATHERED.
25.21	0.17	94	1	100% CARBONACEOUS MUDSTONE	
				TOP OF MT. NICHOLAS LOWER 1 : 410.99 M R.L.	
25.43	0.22	95	2	100% COAL	DULL COAL.
25.56	0.13	100	3	100% COAL	DULL COAL.
25.80	0.24	96	4	90% COAL 10% MUDSTONE	DULL COAL. LAMINAE, RED.
25.96	0.16	94	5	100% COAL	DULL COAL.
26.14	0.18	89	6	100% COAL	DULL COAL.
26.28	0.14	93	7	100% COAL	DULL COAL.
26.59	0.31	90	8	100% COAL	DULL COAL.
26.61	0.02	100		100% MUDSTONE	BANDS.
26.70	0.09	89	9	100% COAL	DULL COAL.
26.82	0.12	92	10	100% COAL	DULL COAL.
27.03	0.21	86	11	100% COAL	DULL COAL.
27.05	0.02	100		100% MUDSTONE	BANDS.
27.12	0.07	86	12	100% COAL	DULL COAL.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
27.13	0.01	100		100% MUDSTONE	BANDS.
27.41	0.28	89	13	100% COAL	DULL COAL.
27.66	0.25	88	14	100% COAL	DULL COAL.
27.67	0.01	100		100% MUDSTONE	BANDS.
27.76	0.09	89	15	100% COAL	DULL COAL.
28.01	0.25	88	16	100% COAL	DULL COAL.
28.13	0.12	92	17	100% COAL, MID LUSTROUS - DULL	
28.30	0.17	94	18	100% COAL	DULL COAL.
28.60	0.30	90	19	100% COAL, MID LUSTROUS - DULL	
28.75	0.15	93	20	90% COAL 10% MUDSTONE	DULL COAL. LAMINAE, RED.
				BASE OF MT. NICHOLAS LOWER 1 : THICKNESS= 3.54 M; SAMPLED THICKNESS= 3.48 M	
28.78	0.03	100		100% CARBONACEOUS MUDSTONE	
28.84	0.06	100		100% MUDSTONE	GREY.
28.85	0.01	100		100% MUDSTONE	CREAM, STRONG ROCK.
29.74	0.89	93		100% SHALE	FOSSILIFERROUS, GREY, VERY STICKY.
30.15	0.41	100		100% SHALE	GREY.
30.91	0.76	100		100% SILTSTONE	GREY, WITH CARBONACEOUS WISPS.
31.16	0.25	100		100% SHALE	GREY.
31.37	0.21	100		100% MUDSTONE	GREY.
31.48	0.11	100		100% COAL	DULL COAL.
31.59	0.11	100		50% SANDSTONE,MEDIUM GRAINED 50% SANDSTONE,MEDIUM GRAINED	POORLY SORTED, GRADING TO. CARBONACEOUS. THINLY BEDDED.
32.09	0.50	100		100% MUDSTONE	GREY.
32.22	0.13	100		100% MUDSTONE	CARBONACEOUS.
32.30	0.08	100		100% CLAYSTONE	
				TOP OF MT. NICHOLAS LOWER 2 : 403.90 M R.L.	
32.90	0.60	100		100% COAL	DULL COAL.
				BASE OF MT. NICHOLAS LOWER 2 : THICKNESS= 0.60 M; SAMPLED THICKNESS= 0.00 M	

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
33.04	0.14	75		100% MUDSTONE	GREY.
33.59	0.55	100		100% SANDSTONE,FINE GRAINED	LITHIC.
33.80	0.21	99		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, MED.-COARSE GRAINED, LIGHT GREY, MODERATELY SPACED JOINTS.
34.20	0.40	99		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, MODERATELY SPACED JOINTS.
41.99	7.79	99		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, MED.-COARSE GRAINED, LIGHT GREY, MODERATELY SPACED JOINTS.
43.27	1.28	99		100% SANDSTONE,MEDIUM GRAINED	BADLY BROKEN, MODERATELY SPACED JOINTS.
43.40	0.13	77		100% MUDSTONE	GREY, FIRM, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
43.41	0.01	100		100% SHEAR/FAULT ZONE	LOWER CONTACT, VERY WIDELY SPACED JOINTS.
43.67	0.26	100		100% COAL, DULL	BADLY BROKEN.
44.11	0.44	100		50% COAL 50% CARBONACEOUS MUDSTONE	DULL COAL. WITH CROSS LAMINATION.
44.12	0.01	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, BANDS.
44.14	0.02	100		100% SANDSTONE,MEDIUM GRAINED	POORLY SORTED, GREY-BROWN.
44.54	0.40	100		100% COAL	DULL COAL.
44.60	0.06	100		100% CARBONACEOUS MUDSTONE	
44.72	0.12	100		100% COAL	DULL COAL.
44.77	0.05	100		80% MUDSTONE 20% COAL	GREY-BROWN. FRAGMENTS, LENSES.
46.62	1.85	100		80% SILTSTONE 15% SHALE 5% BRECCIA	GREY. LENSES. WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
46.80	0.18	100		50% BRECCIA 40% SILTSTONE 10% SHALE	GREY. WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
46.83	0.03	100		80% SILTSTONE 15% SHALE 5% BRECCIA	GREY. LENSES. WITH CROSS LAMINATION, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
46.91	0.08	100		90% CARBONACEOUS MUDSTONE 10% SANDSTONE,FINE GRAINED	LAMINAE, WHITE. VERY CLOSE JOINT SPACING, WITH SLICKENSIDES, JOINTS DIP 45 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
46.96	0.05	100		50% MUDSTONE 50% CARBONACEOUS MUDSTONE	BADLY BROKEN. BADLY BROKEN. VERY CLOSE JOINT SPACING, WITH SLICKENSIDES.
47.22	0.26	100		100% SILTSTONE	GREY, WITH CONVOLUTED BEDDING.
47.39	0.17	100		100% MUDSTONE	FOSSILIFERROUS, GREY.
47.58	0.19	100		100% SHALE	GREY, THINLY BEDDED.
47.62	0.04	100		100% COAL	DULL COAL.
48.02	0.40	100		85% CARBONACEOUS MUDSTONE 15% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS. LITHIC, BANDS.
48.33	0.31	100		100% COAL	DULL COAL, BADLY BROKEN, WITH PYRITE, THINLY BEDDED.
48.38	0.05	100		100% SANDSTONE,MEDIUM GRAINED	CARBONACEOUS, LITHIC, WITH PYRITE, THINLY BEDDED.
48.86	0.48	100		100% MUDSTONE	GREY, WITH PYRITE.
49.68	0.82	100		85% SANDSTONE,FINE GRAINED 10% MUDSTONE 5% CARBONACEOUS MUDSTONE	GREY. LAMINAE. WITH PYRITE, VERY CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
49.90	0.22	100		100% SANDSTONE,FINE GRAINED	GRADING TO, SILTSTONE, GREY.
50.19	0.29	100		100% SHALE	BADLY BROKEN, WITH PLANT REMAINS.
50.59	0.40	100		90% MUDSTONE 10% COAL	GREY. FRAGMENTS, LENSES. CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
50.74	0.15	100		100% BRECCIA	
51.02	0.28	100		90% MUDSTONE 10% COAL	GREY. FRAGMENTS, LENSES. CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
51.49	0.47	100		100% SANDSTONE,FINE GRAINED	LITHIC, GREY, THINLY BEDDED, WITH CROSS LAMINATION.
51.60	0.11	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	LAMINAE. LAMINAE. WITH CROSS LAMINATION.
51.73	0.13	100		100% BRECCIA	
52.03	0.30	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	LAMINAE. LAMINAE. WITH CROSS LAMINATION.
52.35	0.32	100		90% SANDSTONE,FINE GRAINED 10% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY. LAMINAE, PINK. THINLY BEDDED, WITH CROSS LAMINATION.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
52.50	0.15	100		50% SILTSTONE 50% SANDSTONE,FINE GRAINED	LAMINAE, GREY. LAMINAE, GREY. THINLY BEDDED, WITH CROSS LAMINATION.
53.46	0.96	100		90% SANDSTONE,FINE GRAINED 5% COAL 5% SILTSTONE	LITHIC, INTERCALATIONS. FRAGMENTS, LENSES. LAMINAE. THINLY BEDDED, WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
53.69	0.23	100		100% SILTSTONE	FOSSILIFERROUS, GREY, THINLY BEDDED.
54.56	0.87	97		100% SHALE	WIDELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
54.89	0.33	100		100% SILTSTONE	GREY, THINLY BEDDED, WITH CONVOLUTED BEDDING.
55.80	0.91	100		80% MUDSTONE 20% SHALE	GREY. INTERCALATIONS. WITH PLANT REMAINS.
56.15	0.35	100		100% COAL	DULL COAL.
56.28	0.13	100		100% CARBONACEOUS MUDSTONE	WITH PYRITE, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
56.40	0.12	67		95% COAL 5% MUDSTONE	DULL COAL, BADLY BROKEN. LENSES, PELLETAL, PINK.
56.45	0.05	100		100% CARBONACEOUS MUDSTONE	
56.63	0.18	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN.
56.73	0.10	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	BROWN-BLACK. LAMINAE.
56.81	0.08	100		100% SANDSTONE,MEDIUM GRAINED	LITHIC, GREY-BROWN, CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 50 DEG.
66.98	10.17	88		80% SANDSTONE,MEDIUM GRAINED 15% SILTSTONE 5% CLAYSTONE	LITHIC, INTERCALATIONS. INTERCALATIONS, GREY-BROWN. LENSES, INTERCALATIONS. BEDS DIP 20 DEG., WITH CROSS LAMINATION, WITH CARBONACEOUS WISPS.
67.17	0.19	100		50% SANDSTONE,FINE GRAINED 50% CARBONACEOUS MUDSTONE	LITHIC, LAMINAE. LAMINAE.
67.30	0.13	100		80% SANDSTONE,MEDIUM GRAINED 20% CARBONACEOUS MUDSTONE	POORLY SORTED, LITHIC. PELLETAL, LENSES. VERY THINLY BEDDED, BEDS DIP 30 DEG., CLOSELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 30 DEG.
68.45	1.15	97		100% SANDSTONE,MEDIUM GRAINED	GREY, THINLY BEDDED, VERY CLOSE JOINT SPACING, WITH SLICKENSIDES.
69.25	0.80	100		95% MUDSTONE 5% CLAYSTONE	BADLY BROKEN, GREY. BANDS, GREEN-BROWN. WITH PLANT REMAINS, VERY CLOSE JOINT SPACING, JOINTS DIP 85 DEG.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
69.25	0.80	100		95% MUDSTONE 5% CLAYSTONE	BADLY BROKEN, GREY. BANDS, GREEN-BROWN. WITH PLANT REMAINS, MODERATELY SPACED JOINTS, WITH SLICKENSIDES, JOINTS DIP 45 DEG.
70.66	1.41	100		95% CARBONACEOUS MUDSTONE 5% COAL	FRAGMENTS, LENSES. WIDELY SPACED JOINTS, WITH SLICKENSIDES.
72.26	1.60	100		90% MUDSTONE 5% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	GREY. LITHIC, LENSES. INTERCALATIONS. THINLY BEDDED.
73.33	1.07	100		95% SILTSTONE 5% SANDSTONE,MEDIUM GRAINED	LITHIC, LENSES.
73.85	0.52	96		60% MUDSTONE 40% SANDSTONE,MEDIUM GRAINED	CONGLOMERATIC, PELLETAL. LITHIC.
75.92	2.07	100		95% SANDSTONE,MEDIUM GRAINED 5% COAL	LITHIC. FRAGMENTS, LENSES. THINLY BEDDED.
77.07	1.15	100		100% MUDSTONE	CARBONACEOUS, GREY-BROWN, CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
78.02	0.95	95		90% SANDSTONE,MEDIUM GRAINED 10% COAL	LITHIC. LENSES, LAMINAE. CLOSELY SPACED JOINTS, WITH SLICKENSIDES.
91.64	13.62	99		85% SANDSTONE,MEDIUM GRAINED 15% MUDSTONE	LITHIC, BADLY BROKEN. PELLETAL, CONGLOMERATIC.
92.20	0.56	100		60% MUDSTONE 40% SILTSTONE	INTERCALATIONS, GREY-GREEN. CARBONACEOUS, INTERCALATIONS. THICKLY LAMINATED, WITH CONVOLUTED BEDDING, WITH SLUMP STRUCTURES.
94.20	2.00	95		90% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE 5% COAL	LITHIC, INTERCALATIONS. LAMINAE. LENSES, FRAGMENTS. WITH CONVOLUTED BEDDING, WITH SLUMP STRUCTURES.
97.68	3.48	99		95% SANDSTONE,MEDIUM GRAINED 5% MUDSTONE	LITHIC, MASSIVE. BANDS.
98.71	1.03	99		100% BRECCIA	SANDSTONE, MEDIUM GRAINED.
102.76	4.05	99		99% SANDSTONE,MEDIUM GRAINED 1% COAL	LITHIC, MASSIVE. FRAGMENTS, LENSES. WITH CALCITE ON JOINTS, INFILLED WITH CALCITE.
105.81	3.05	99		100% SANDSTONE,MEDIUM GRAINED	GRADING TO, FINE GRAINED SANDSTONE, WITH CONVOLUTED BEDDING, WITH SLUMP STRUCTURES.
106.81	1.00	99		100% SANDSTONE,MEDIUM GRAINED	LITHIC, BADLY BROKEN.
108.01	1.20	99		100% SANDSTONE,MEDIUM GRAINED	LITHIC, MASSIVE.
108.86	0.85	100		100% SHALE	SILTY, GREY.

DEPTH TO BASE M	THICKNESS M	REC %	SAMPLE NUMBER	ROCK TYPE *** CORE DESCRIPTION ***	GEOLOGICAL DESCRIPTION
110.70	1.84	100		90% SANDSTONE,FINE GRAINED 10% SILTSTONE	LITHIC. BANDS. CLOSELY SPACED JOINTS.
110.90	0.20	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LITHIC, LAMINAE. GREY. CLOSELY SPACED JOINTS.
111.55	0.65	100		100% SHALE	
116.46	4.91	100		50% SANDSTONE,FINE GRAINED 50% MUDSTONE	LITHIC, LAMINAE. LAMINAE. WITH CARBONACEOUS WISPS, CLOSELY SPACED JOINTS.
120.66	4.20	100		95% SANDSTONE,MEDIUM GRAINED 5% SILTSTONE	LITHIC. CARBONACEOUS, BANDS. THINLY BEDDED, BEDS DIP 30 DEG.
121.56	0.90	100		50% CARBONACEOUS MUDSTONE 50% SANDSTONE,MEDIUM GRAINED	INTERCALATIONS. LITHIC, INTERCALATIONS. THINLY BEDDED.
122.26	0.70	100		100% SILTSTONE	GREY, THINLY BEDDED.
122.32	0.06	100		100% SHALE	THINLY BEDDED.
123.89	1.57	100		60% SANDSTONE,MEDIUM GRAINED 40% SHALE	LITHIC, INTERCALATIONS. INTERCALATIONS.
124.11	0.22	100		90% SANDSTONE,MEDIUM GRAINED 5% GRANITE 5% PEBBLE CONGLOMERATE	LITHIC. PEBBLY. QUARTZOSE.
124.30	0.19	100		100% SHALE	GREY-GREEN, WITH DETRITAL QUARTZ.
133.26	8.96	99		100% SILTSTONE	QUARTZOSE, PEBBLY, DARK GREY.

SEAM SUMMARY

SEAM	SAMPLED THICKNESS	DEPTH RANGE	THICKNESS
L1	3.48 M	25.21 - 28.75 M	3.54 M
L2	0.00 M	32.30 - 32.90 M	0.60 M

SAMPLE SUMMARY

SAMPLE NUMBER	DEPTH RANGE	THICKNESS
1	25.04 - 25.21 M	0.17 M
2	25.21 - 25.43 M	0.22 M
3	25.43 - 25.56 M	0.13 M
4	25.56 - 25.80 M	0.24 M
5	25.80 - 25.96 M	0.16 M
6	25.96 - 26.14 M	0.18 M
7	26.14 - 26.28 M	0.14 M
8	26.28 - 26.59 M	0.31 M
9	26.61 - 26.70 M	0.09 M
10	26.70 - 26.82 M	0.12 M
11	26.82 - 27.03 M	0.21 M
12	27.05 - 27.12 M	0.07 M
13	27.13 - 27.41 M	0.28 M
14	27.41 - 27.66 M	0.25 M
15	27.67 - 27.76 M	0.09 M
16	27.76 - 28.01 M	0.25 M
17	28.01 - 28.13 M	0.12 M
18	28.13 - 28.30 M	0.17 M
19	28.30 - 28.60 M	0.30 M
20	28.60 - 28.75 M	0.15 M