

Appendix 2 - DDH OJ 003

Drill hole details:

Collar Co ordinates	E 55 525 602
	N 5 300 695
RL	443m
Dip	-90 ⁰
Drill type	HQ Diamond
Depth	45.65m

Graphic log	2
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Drill log	11

Graphic log

MIDLANDS ENERGY

DRILL HOLE No 0J003

SHEET 1 OF 3

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA-GPS)	
0	-	-90	Easting_	55 525 602
			Northing_	5 300 695
			Elevation (m)	443
			Azimuth_Mag	-
			Dip	-90°

PROJECT: SOUTHERN MIDLANDS COAL
PROSPECT: EL26/2008 (MUDWALLS ROAD)
DATE: 29-3-12 → 2-4-12
LOGGED BY: KAREN ADAMS

HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO	PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG				GEOLOGY NOTES	SUMMARY LOGS
					1	3	1	3	5	STRUCT	ALT	0.06	0.5	2	8		
1	-	-	-														
2	-	-	-														
3	-	-	-														
4	-	-	-														
5	100	0															CY
6	100	26															MS/SS
7	94	80															
8	100	100															SS
9	100	100															MS
10	89	50															DOL
11	100	50								Jt 25°							MS
12	59	26								Ft							CL
13	100	67															MS
14	98	90															
15	100	100															MS/SS
16	100	98								Bd 80°							
17	100	90															
18	100	100															
19	100	100															SS
20	100	100															
REMARKS																	

HQ ↓

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA - GPS)
			Easting_ 55 525 602
			Northing_ 5 300 695
			Elevation (m) 443
			Azimuth_Mag -
			Dip - 90°

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HOLE DEPTH	CORE RECOVERY	ROD	SAMPLE NO PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOG	
				1	3	1	3	5	STRUCT	ALT	0	10	20	30	40			50
21	100	55							JT	30°							20.57-23.50: GREY TO DARK GREY MUDSTONE AND CARBONACEOUS MUDSTONE. CARBONACEOUS MUDSTONE INCREASING IN ABUNDANCE DOWN HOLE. FREQUENT JOINTING TO 21.2m	SS
22	100	34							JT	20°								MS/ CMS
23	100	74																
24	100	50							JT	45°							23.50-23.64: CARBONACEOUS MUDSTONE 23.64-23.72: COAL AND CARBONACEOUS MUDSTONE WITH CALCITE CLEATS 23.72-23.85: CARBONACEOUS MUDSTONE AND COAL MUD 23.85-23.90: DARK GREY TO GREY INTERBEDDED CARBONACEOUS MUDSTONE AND MUDSTONE 23.90-25.50: COAL AND CARBONACEOUS MUDSTONE WITH MINOR CALCITE VEINING UP HOLE	MS
25	100	58							JT	20°								
26	100	17							JT	10°							25.50-26.37: FREQUENTLY JOINTED GREY MUDSTONE	MS
27	100	58							JT	70°							26.37-27.16: GREY MUDSTONE	MS
28	100	16							JT	5°							27.16-27.25: COAL AND CARBONACEOUS MUDSTONE 27.25-27.35: GREY TO DARK GREY MUDSTONE AND CARBONACEOUS MUDSTONE 27.35-33.30: PALE GREY, FREQUENTLY JOINTED, SILICA-SERICITE ALTERED MUDSTONE. INCREASING DEGREE OF ALTERATION DOWN HOLE	
29	100	100							JT	45°								
30	100	100							JT	45°								MS
31	100	80							JT	35°								
32	99	75																
33	99	80							FT	65°								
34	85	44							JT	20°							33.30-33.45: CORE LOSS - BROKEN GROUND 33.45-40.37: FREQUENTLY FRACTURED, PALE GREY, SILICA-SERICITE ALTERED MUDSTONE AND SANDSTONE. SANDSTONE INCREASING IN ABUNDANCE DOWN HOLE. CALCITE VEINING ABUNDANCE IN PROXIMITY WITH DOWN HOLE CONTACT.	SS
35	100	29							JT	30°								
36	100	0							JT	70°								MS
37	100	0							JT	20°								SS
38	100	0							JT	45°								
39	100	22																
40	100	20																
REMARKS																		

Survey Depth	Azimuth	Dip	Hole Co-ordinates (GDA - GPS)	
			Easting_	55 525 602
			Northing_	5 300 695
			Elevation (m)	443
			Azimuth_Mag	-
			Dip	- 90°

PROJECT: SOUTHERN MIDLANDS COAL
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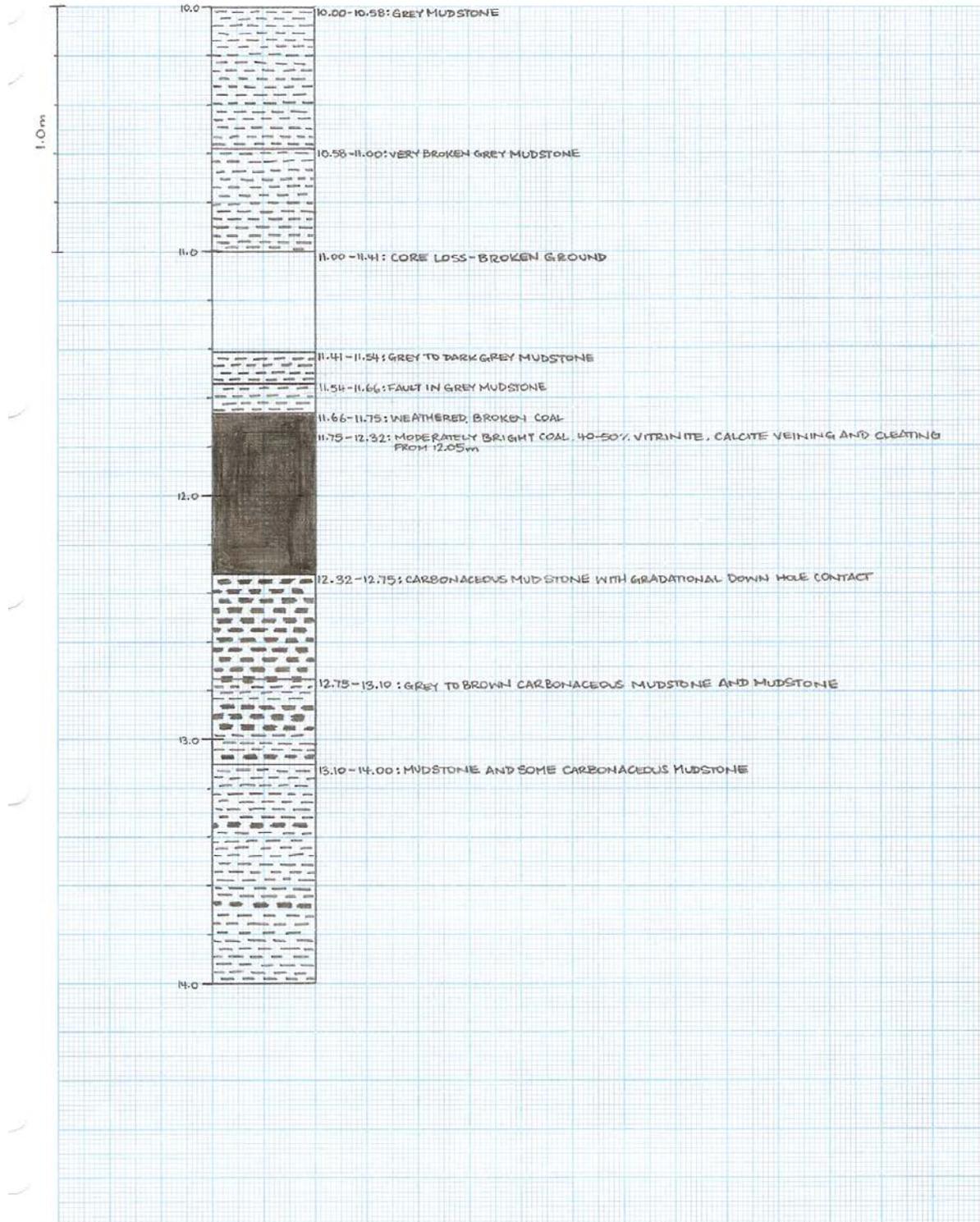
HOLE DEPTH	CORE RECOVERY	RQD	SAMPLE NO. PREFIX	SULPHIDES					PICTORIAL LOG		GRAPHIC LOG					GEOLOGY NOTES	SUMMARY LOGS	
				1	3	1	3	5	STRUCT	ALT	0.05	0.5	2	8	32			64
41	100	0																SS
42	100	96																
43	100	100																Da
44	100	100																
45	100	100																
45.6	100	60																
EQ1																		
REMARKS																		

Detailed seam logs

OJ003 - DETAILED LOG - SEAM ONE

1mm Squares

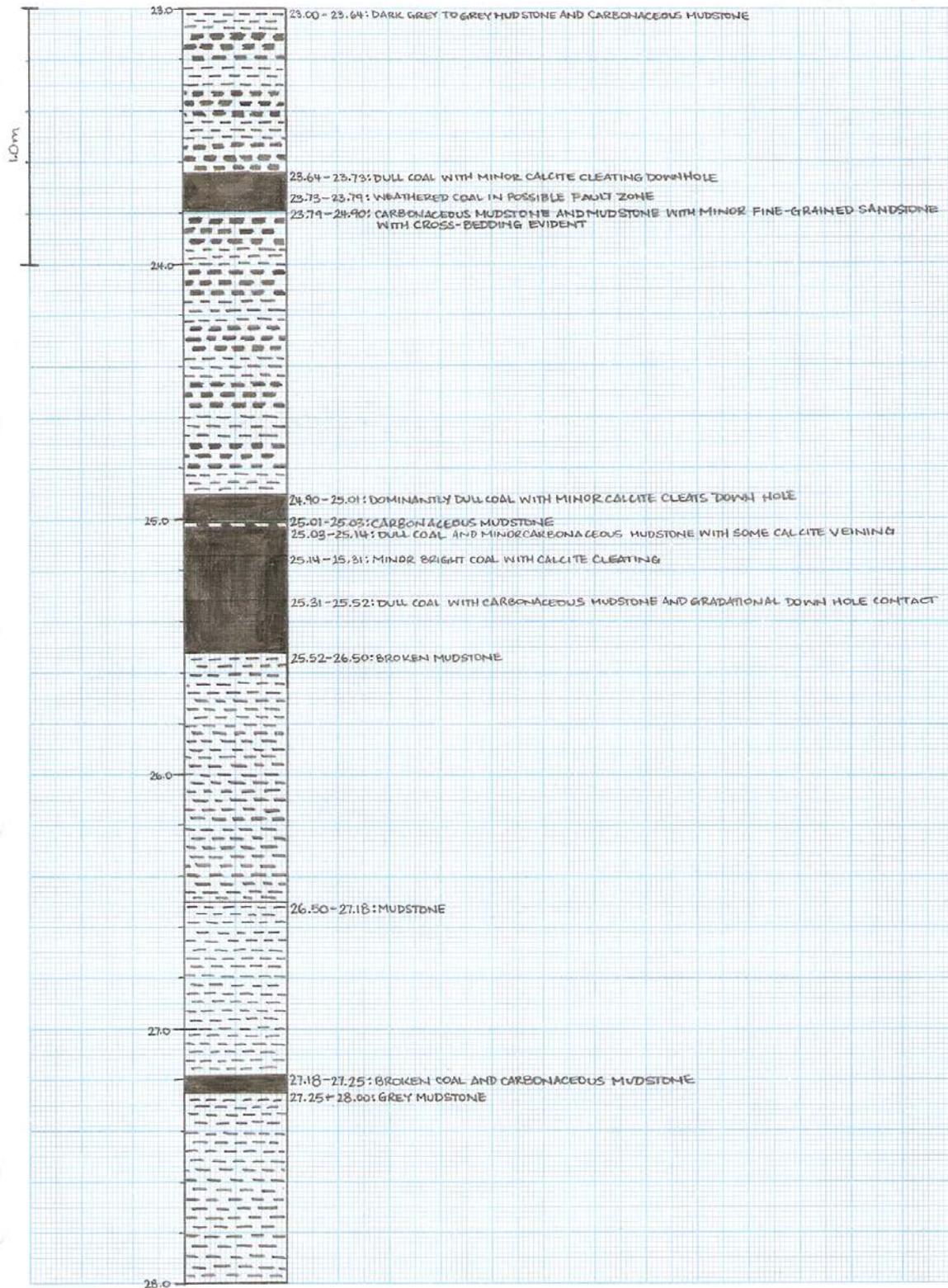
SCALE 1:20



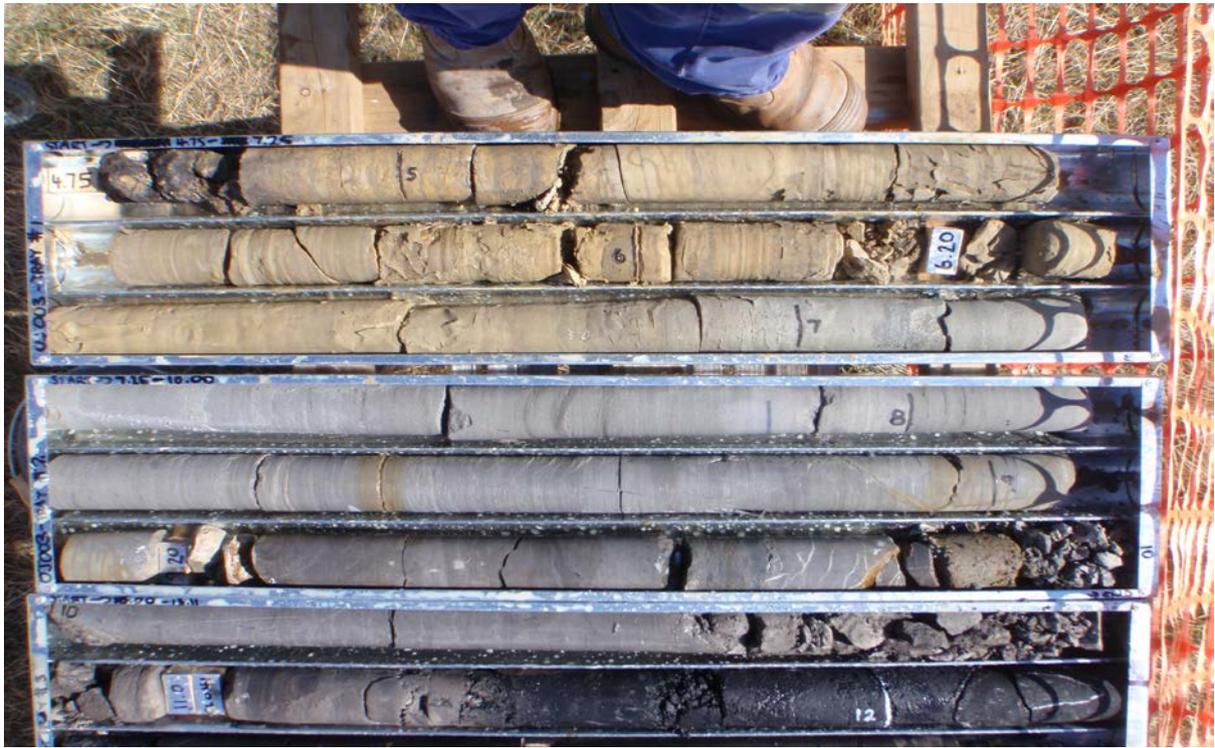
OJ003 - DETAILED LOG - SEAM TWO

1mm Squares

SCALE 1:20



Core photographs



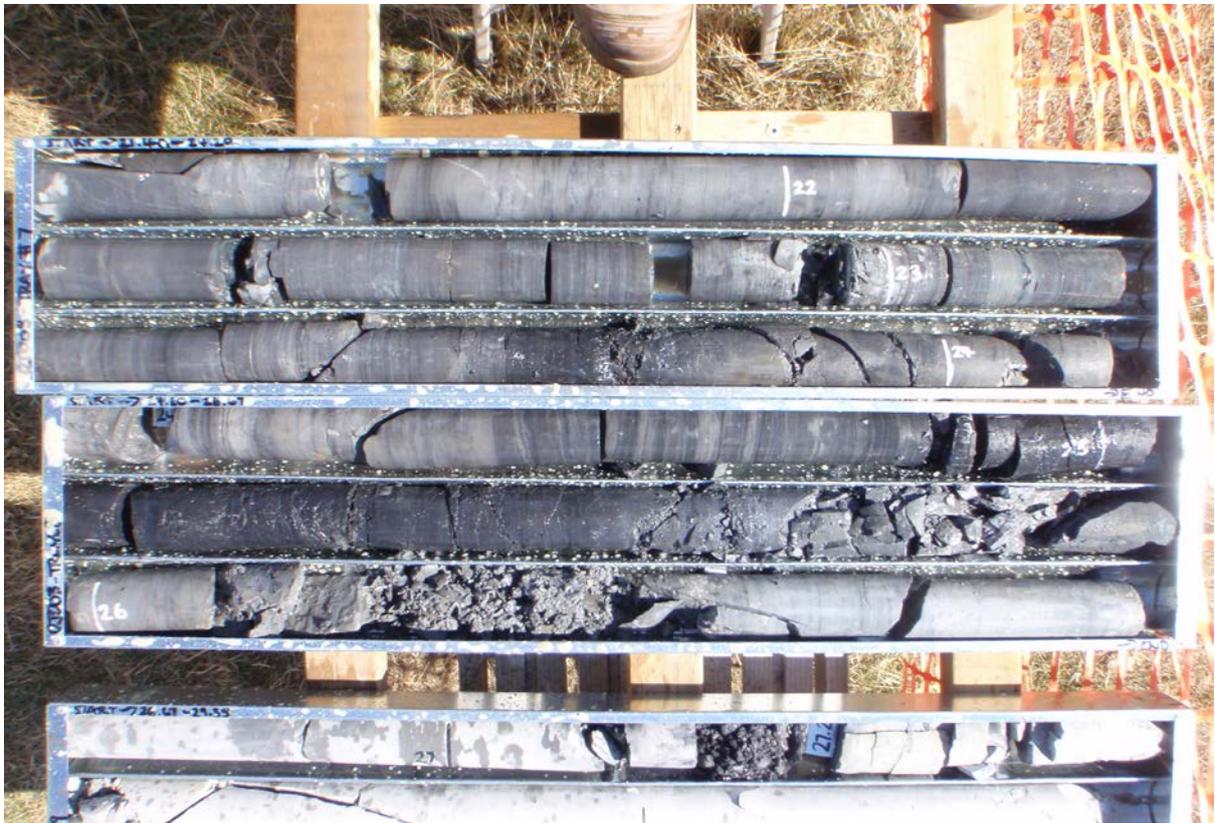
Core trays 1 & 2 - 4.75 to 10.00



Core trays 3 & 4 - 10.00 to 15.98



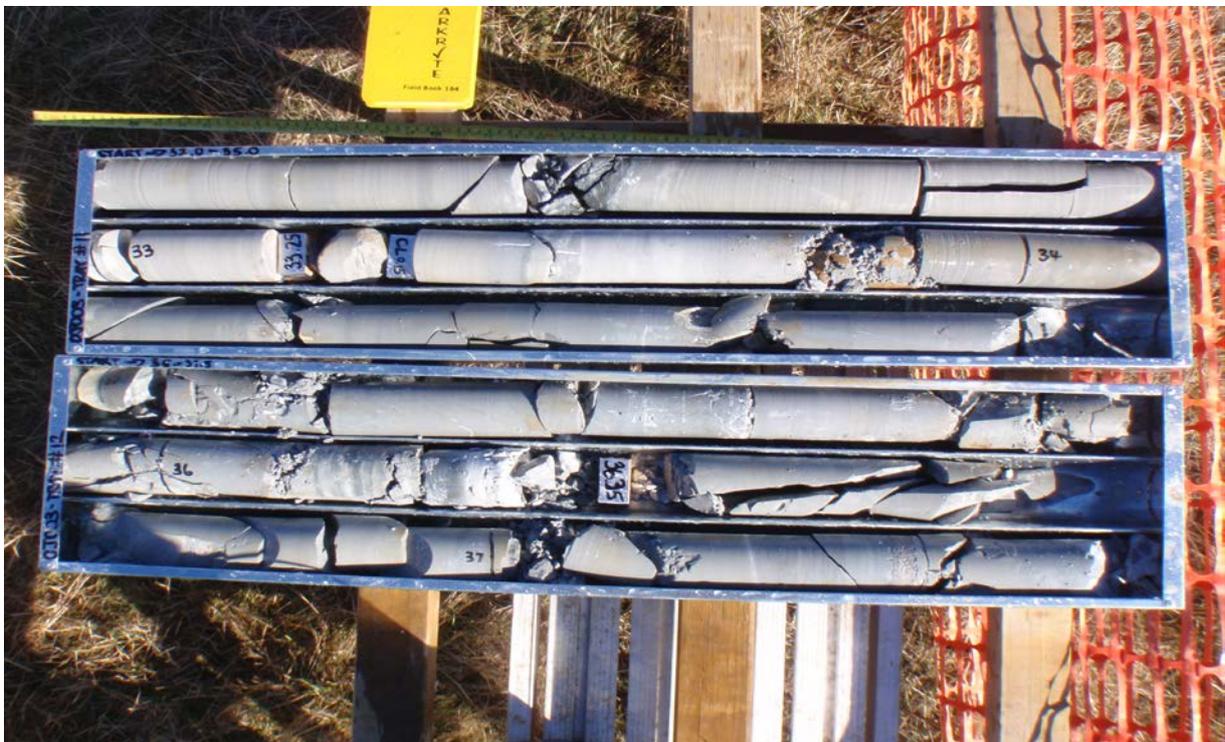
Core trays 5 & 6 – 15.98 to 21.40



Core trays 7 & 8 – 21.40 to 26.67



Core trays 9 & 10 – 26.67 to 32.00



Core trays 11 & 12 – 32.00 to 37.50



Core trays 13 & 14 – 37.50 to 42.65



Core trays 15 to 16 – 42.65 to 45.65 EOH

Drill Hole ID: OJ003

Project: Southern Midlands Coal

License: EL26/2008

Date Drilled: 29/3/12 - 2/4/12

Collar: Easting: 55 525 602

Northing: 5 300 695

Elevation: 443

(GDA - GPS)

Azimuth: n/a

Dip: -90 degrees

mFrom	mTo	Description
0	4.75	Cutting bit - No core. Weathered coal intercepted from 3.3-3.75m & 4.2-4.6m
4.75	4.86	Black clay
4.86	5.16	Orange and grey clay
5.16	6.8	Orange to brown, strongly to moderately weathered interbedded mudstone and sandstone
6.8	8.34	Grey, medium to fine-grained lithic sandstone
8.34	9.15	Grey mudstone
9.15	9.8	Grey, fine-grained dolerite
9.8	11	Grey to brown mudstone. Very broken at up and downhole boundaries
11	11.41	Core Loss - broken ground
11.41	11.66	Brown mudstone and carbonaceous mudstone
11.66	12.32	Moderately bright, brittle coal with calcite veining. Somewhat dull and weathered up hole proximal to fault.
12.32	12.6	Dark brown carbonaceous mudstone
12.6	17.23	Grey mudstone and minor carbonaceous mudstone and minor fine-grained sandstone increasing downhole. Bedding visible at 15.4m and cross bedding around 17m
17.23	20.57	Grey to pale grey, medium to fine-grained lithic sandstone with minor carbonaceous mudstone flaser banding
20.57	23.5	Grey to dark grey mudstone and carbonaceous mudstone. Carbonaceous mudstone increasing in abundance down hole. Frequent Jointing to 21.2m
23.5	23.64	Carbonaceous mudstone
23.64	23.72	Coal and carbonaceous mudstone with calcite cleats
23.72	23.85	Carbonaceous mudstone and coal mud
23.85	24.9	Dark grey to grey interbedded carbonaceous mudstone and mudstone
24.9	25.5	Coal and carbonaceous mudstone with minor calcite veining up hole
25.5	26.37	Frequently jointed grey mudstone
26.37	27.18	Grey mudstone
27.18	27.25	Coal and carbonaceous mudstone
27.25	27.35	Grey to dark grey mudstone and carbonaceous mudstone

27.35	33.3	Pale grey, frequently jointed, silica-sericite altered mudstone. Increasing degree of alteration down hole. Appears to be dolerite related contact metamorphism
33.3	33.45	Core Loss - Ground away/broken ground
33.45	40.37	Frequently fractured, pale grey, silica-sericite altered (hornfelsed) mudstone and sandstone. Sandstone increasing in abundance downhole. Calcite veining abundant in proximity with downhole contact
40.37	45.65	Grey-green, medium-grained dolerite. Fine-grained chilled margin and some vein brecciation proximal to uphole contact. Frequent calcite veining throughout.
	EOH	