

DDH BH 300/13

0.00 — 17.10 M



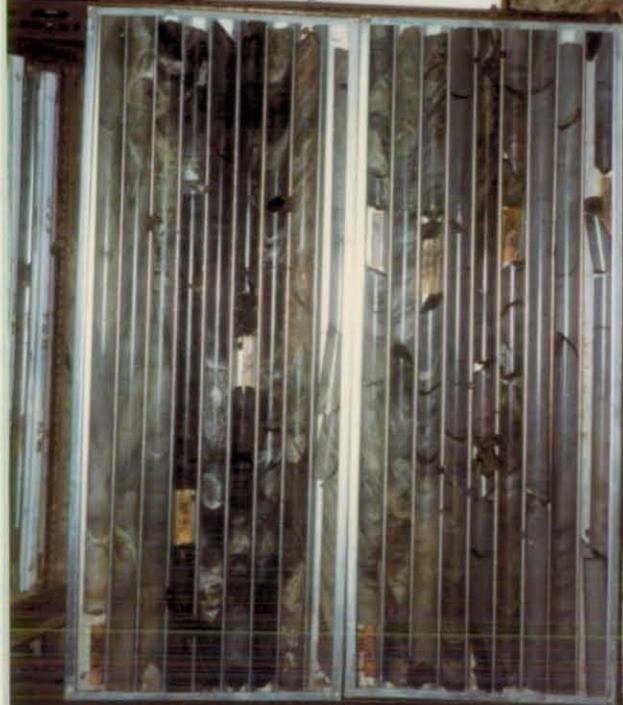
DDH BH 300/13

17.10 — 33.60 M



DDH BH 300/13

33.60 — 50.10 M



DDH BH 300/13

50.10 — 58.14 M

ALL REMOVED



DDH BH 300/12

0.00 — 16.76

DDH BH 300/12

16.76 — 33.16m

DDH BH 300/12

33.16 — 49.75m

DDH BH 300/12

49.75 — 65.90m



DDH BH 300/11  
0.00 — 17.50M

DDH BH 300/11  
17.50 — 33.50M  
E.O.H.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 300/10 Bold Head

PLANNING PROPOSER: S.G. Brown DEPTH:  
LOCATION: M37 Access  
PURPOSE OF HOLE: Test footwall mineralisation  
PROPOSED CO-ORDS: 40 395 E 10 295 N  
INCLINATION: +30  
BEARING: 91 °Grid °Mag  
TARGET: E N  
DEPTH:  
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N  
SURVEYED BEARING: °Grid °Mag  
SURVEYED IN BY: B. Lennon DATE:  
ACTUAL CO-ORDS: 40 395.3 E 10 294.7 N  
R.L. OF COLLAR: 895.3  
INCLINATION OF HOLE: +32°00'  
PICKED UP BY: G. Tennant DATE: 21.09.83

SUMMARY LOGGED BY: S.G. Brown  
RESULTS: Only minor mineralisation present.

DRILLING DATE COMMENCED: 29.09.82 DATE TERMINATED: 31.09.82  
DRILLER/CONTRACTOR: K.I.S.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE: 46TT  
DEPTH: 21.0  
WEDGE PLACED: Nil DEPTH: PROPOSER:  
EXTENSION: Nil  
FINAL DEPTH: 21.0  
REASON FOR TERMINATION: Ran out of time.  
CONDITION OF HOLE ON COMPLETION:  
CASING: Nil  
CEMENTED: No  
BORE HOLE SURVEY: No  
WATER: No  
COMMENTS ON DRILLING CONDITIONS: Ok



GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 300/10 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 8859	0.0	1.0	1.0	1.0	0.49			
8860	1.0	2.0	1.0	1.0	0.14			
8861	2.0	3.0	1.0	1.0	0.69			
8862	3.0	4.0	1.0	1.0	0.06			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 300/10 Bold Head

- 0.00 - 2.81 m      Garnet skarn  
A pyroxene garnet skarn with minor remnant of marble.  
Good grade of scheelite is present in this area.
- 2.81 - 3.44 m      Biotite pyroxene hornfels  
A small zone of biotite pyroxene hornfels very disturbed.
- 3.44 - 5.30 m      Podded pyroxene hornfels  
This has a fine grained pyroxene rich groundmass with  
irregular pods of garnet present throughout.  
  
This unit grades into a more normal pyroxene garnet  
hornfels.
- 5.30 - 16.25 m      Pyroxene garnet hornfels  
A fairly normal pgh with calcite pods present throughout.  
Minor scheelite mineralisation is present throughout this  
unit with some molybdenite present at 15.0 m.
- 16.25 - 16.40 m      Fault zone  
Zone of very sheared and leached core.
- 16.40 - 17.44 m      Pyroxene garnet hornfels as above
- 17.44 - 21.0 m      Marble  
A grey white recrystallised marble much leached and  
weathered. Faults may be present at 19.10 and 20.50 m.

DDH BH 300/10

0.00 — 16.35 M.

DDH BH 300/10

16.35 — 21.00 M.  
E.O.H.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 300/9 Bold Head

PLANNING PROPOSER: S.G. Brown DEPTH:  
LOCATION: M37 Access  
PURPOSE OF HOLE: Test mineralisation of footwall  
PROPOSED CO-ORDS: 40 395 E 10.295 N  
INCLINATION: +5°  
BEARING: 090 °Grid °Mag  
TARGET: E N  
DEPTH: 30 m  
CHECKED BY: S.G. Brown DATE: 01.09.83

SURVEY SURVEY CO-ORDS: E N  
SURVEYED BEARING: °Grid °Mag  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40 394.9 E 10 294.7 N  
R.L. OF COLLAR: 894.4  
INCLINATION OF HOLE: +9°15'  
PICKED UP BY: G. Tennant DATE: 21.09.82

SUMMARY LOGGED BY: S.G. Brown  
RESULTS: 1.0 - 3.0 m 2 m @ 0.87% W03  
12.0 - 13.0 m 1 m @ 1.07% W03  
15.0 - 16.0 m 1 m @ 0.59% W03

DRILLING DATE COMMENCED: 06.09.82 DATE TERMINATED: 09.09.82

DRILLER/CONTRACTOR: K.I.S.

CASING: SIZE:  
DEPTH:

CORE: SIZE: 46TT  
DEPTH: 24.0

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 24.0

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: No

BORE HOLE SURVEY: Single Shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Ok



GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 300/9 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.20	3.20	3.00	94
3.20 - 6.20	3.00	2.80	93
6.20 - 9.20	3.00	2.80	93
9.20 - 12.10	2.90	2.90	100
12.10 - 15.20	3.10	3.00	97
15.20 - 18.40	3.20	3.20	100
18.40 - 20.40	2.00	2.00	100
20.40 - 24.00	3.60	3.40	94
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 300/9 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 8812	0.0	1.0	1.0	1.0	0.19			
8813	1.0	2.0	1.0	1.0	1.00			
8814	2.0	3.0	1.0	1.0	0.74			
8815	3.0	4.0	1.0	1.0	0.05			
8816	4.0	5.0	1.0	1.0	0.04			
8817	5.0	6.0	1.0	1.0	0.05			
8818	6.0	7.0	1.0	1.0	0.04			
8819	7.0	8.0	1.0	1.0	0.06			
8820	8.0	9.0	1.0	1.0	0.04			
8821	9.0	10.0	1.0	1.0	0.06			
8822	10.0	11.0	1.0	1.0	0.05			
8823	11.0	12.0	1.0	1.0	0.13			
8824	12.0	13.0	1.0	1.0	1.07			
8825	13.0	14.0	1.0	1.0	0.21			
8826	14.0	15.0	1.0	1.0	0.15			
8827	15.0	16.0	1.0	1.0	0.59			
8828	16.0	17.0	1.0	1.0	0.07			
8829	17.0	18.0	1.0	1.0	0.10			
8830	18.0	19.0	1.0	1.0	0.05			
8831	19.0	20.0	1.0	1.0	0.10			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 300/9 Bold Head

- 0.0 - 0.18 m Marble  
Lightish grey green marble.
- 0.18 - 2.48 m Garnet skarn  
A well mineralised andradite garnet skarn with abundant pyroxene present throughout.
- 2.48 - 16.35 m Garnet pyroxene skarn  
A replaced massive marble with abundant grossularite garnet, pyroxene and with unreplaced patches of calcite present throughout.  
  
Some minor mineralisation is present throughout reaching ore grade from 12.75 m to about 15.00 m.  
  
The core is broken from about 14.0 m on and the last 1.35 m of this unit could have bedding present in it.
- 16.35 - 20.17 m Mineralised banded footwall beds  
Consists of alternating bands of barren marble and andradite garnet skarn with some mineralisation especially in the first 1.5 metres.  
  
Bedding is at 65 degrees LCA at 18.0 m.
- 20.17 - 23.50 m Banded biotite pyroxene hornfels  
Dominantly alternating bands of biotite and pyroxene hornfels with some minor marble horizons.  
  
Bedding is at 50 degrees LCA at 21.0 m.
- 23.50 - 24.0 m Brecciated marble  
Fault possibly fairly minor in a wide marble band.

E.O.H.

DDH BH 300/9

0.00 — 17.00 m

DDH BH 300/9

17.00 — 24.00 m  
F.O.H.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 300/8 Bold Head

PLANNING PROPOSER: C. Kendall DEPTH:  
LOCATION: Main Decline Face  
PURPOSE OF HOLE: Test dip of Mine Series/Volcanic Contact and  
PROPOSED CO-ORDS: Major Fault  
40 306 E 10 312 N  
INCLINATION: -40°  
BEARING: 198° 45' °Grid °Mag  
TARGET: E N  
DEPTH:  
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: 40306.18 E 10310.85 N  
SURVEYED BEARING: °Grid °Mag  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40306.18 E 10310.85 N  
R.L. OF COLLAR: 862.49  
INCLINATION OF HOLE: -39°  
PICKED UP BY: B. Lennon DATE: 03.02.82

SUMMARY LOGGED BY: S.G. Brown  
RESULTS: Intersected Fault - possible Graham's Road Fault.

DRILLING DATE COMMENCED: 12.01.82 DATE TERMINATED: 22.01.82

DRILLER/CONTRACTOR:

CASING: SIZE:  
DEPTH:

CORE: SIZE: 46TT  
DEPTH: 51.8

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 51.8

REASON FOR TERMINATION: Through B Lens

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: No

BORE HOLE SURVEY: Yes

WATER: Minor

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. B 300/8 Bold Head

Surveyed method: M.S.  
Final depth: 51.8  
Casing depth: Nil

Depth surveyed to: 50.0 m  
Date surveyed: 03.02.82  
Surveyed by: R. Drake  
Checked by: C. Kendall

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			
25.0	199°	59°E	51°	-39°	12.0 m	21.6	3.42
50.0	199°	59°E	51°	-39°	25.0 m	43.2	6.84

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 300/8 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 2.80	2.80	2.60	93
2.80 - 4.50	1.70	1.70	100
4.50 - 7.50	3.00	3.00	100
7.50 - 10.50	3.00	2.90	97
10.50 - 13.50	3.00	3.00	100
13.50 - 16.50	3.00	2.90	97
16.50 - 19.20	2.70	3.00	111
19.20 - 22.20	3.00	2.70	90
22.20 - 24.50	2.30	2.30	100
24.50 - 27.50	3.00	3.00	100
27.50 - 30.50	3.00	2.70	90
30.50 - 33.50	3.00	2.80	93
33.50 - 36.40	2.90	2.90	100
36.40 - 37.80	1.40	1.40	100
37.80 - 38.60	0.80	0.90	112
38.60 - 41.60	3.00	2.90	97
41.60 - 43.90	2.30	2.30	100
43.90 - 46.80	2.90	2.80	97
46.80 - 49.80	3.00	3.00	100
49.80 - 50.60	0.80	0.80	100
50.60 - 51.80	1.20	0.65	54
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 300/8 Bold Head

0.00 - 2.32 m

Biotite hornfels

A dark black purple biotite hornfels with well developed fine grey bands and veinlets present throughout.

Typical of the bh below B Lens.

2.32 - 44.20 m

Marble

A grey black recrystallised marble with a very disturbed appearance throughout.

The unit is generally competent and unweathered but between 23.0 m to 25.5 m, 30.8 m to 33.5 m and 36.5 m to 37.8 m are some zones of leached and weathered material. Bedding is not particularly obvious but is recorded as:

13.8 m 25 degrees LCA,  
19.6 m 26 degrees LCA,  
26.2 m 37 degrees LCA.

Grossularite and pyroxene are present in significant amounts between 2.32 m and 4.70 m but the unit is barren of scheelite mineralisation.

44.20 - 49.18 m

Garnet pyroxene hornfels

A unit of very fine grained generally grossularite rich rock. Represents replacement of the original marble horizon and some minor unreplaced marble patches do occur.

Some minor scheelite mineralisation is present at 48.48 m.

49.18 - 50.6 m

Fault Zone

This is a zone of mixed material. The first 0.6 m is a breccia, well reconsolidated. Below this the core is leached and weathered to about 50.14 m from where it becomes a clay pug with weathered rock fragments and some fragments of vein quartz.

50.6 - 51.80 m

Biotite hornfels

A purple colour biotite quartz hornfels unit which looks more like mine series bh rather than that found in the upper volcanic sequence.

E.O.H.

DDH BH 300/8

29.20 — 43.54 m.

DDH BH 300/8

43.54 — 51.80 m.

DDH BH 300/8

0.00 — 14.92 m.

DDH BH 300/8

14.92 — 29.20 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. B 300/7 Bold Head

PLANNING PROPOSER: C. Kendall DEPTH: 60 m  
LOCATION: Decline Face  
PURPOSE OF HOLE: Test ground conditions ahead of Decline.  
PROPOSED CO-ORDS: 40306 E 10312 N  
INCLINATION:  $-8^{\circ}$   
BEARING:  $177^{\circ}$  Grid  $^{\circ}$ Mag  
TARGET: E N  
DEPTH:  
CHECKED BY: S.G. Brown DATE: 27.01.82

SURVEY SURVEY CO-ORDS: E N  
SURVEYED BEARING:  $^{\circ}$ Grid  $^{\circ}$ Mag  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40306.64 E 10310.18 N  
R.L. OF COLLAR: 863.12  
INCLINATION OF HOLE:  $-6^{\circ}20'$   
PICKED UP BY: B. Lennon DATE: 03.02.82

SUMMARY LOGGED BY: S.G. Brown  
RESULTS: 23.0 - 24.6 m 1.6 m @ 0.64% WO3

DRILLING DATE COMMENCED: 01.02.83 DATE TERMINATED: 10.02.83  
DRILLER/CONTRACTOR: A.D.D.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE: 46TT  
DEPTH: 56.0  
WEDGE PLACED: Nil DEPTH: PROPOSER:  
EXTENSION: Nil  
FINAL DEPTH: 56.0 m  
REASON FOR TERMINATION: Past target area  
CONDITION OF HOLE ON COMPLETION:  
CASING: Nil  
CEMENTED: No  
BORE HOLE SURVEY: Yes  
WATER:  
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. B300/7 Bold Head

Surveyed method: M/S  
 Final depth: 56.0 m  
 Casing depth: Nil

Depth surveyed to: 44.0 m  
 Date surveyed: 28.01.82  
 Surveyed by: I. Williams  
 Checked by: S.G. Brown

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.			
25	179°30'	S29°E	84°	-6°	2.61	10284.88	40305.94
36	178°30'	S30°E	83°30'	-6°30'	3.63	10276.58	40306.04
44	178°30'	S30°E	83°30'	-6°30'	4.54	10268.38	40305.84
56.0 m	178°30'	S30°E (Assume	83°30'	-6°30'	5.90	10256.38	40305.34

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. B300/7 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.10	3.10	3.05	98
3.10 - 5.60	2.50	2.40	96
5.60 - 8.60	3.00	2.88	96
8.60 - 11.60	3.00	3.04	101
11.60 - 14.60	3.00	2.61	87
14.60 - 17.60	3.00	3.34	111
17.60 - 20.60	3.00	3.04	101
20.60 - 23.60	3.00	2.98	99
23.60 - 26.60	3.00	2.95	98
26.60 - 29.60	3.00	3.00	100
29.60 - 32.60	3.00	2.90	97
32.60 - 35.40	2.80	2.80	100
35.40 - 38.40	2.80	2.80	100
38.40 - 40.60	2.20	2.20	100
40.60 - 41.70	0.85	0.85	100
41.70 - 42.90	1.36	1.20	88
42.90 - 45.40	2.05	2.00	96
45.40 - 46.00	0.55	0.55	100
46.00 - 46.70	0.76	0.76	100
46.70 - 48.00	1.25	1.25	100
48.00 - 50.00	2.00	1.88	94
50.00 - 52.40	2.40	2.24	93
52.40 - 55.20	2.80	2.88	103
55.20 - 56.00	0.80	0.56	70
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. B300/7 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 8832	23.0	24.0	1.0	1.0	0.30			
8833	24.0	24.6	0.60	0.60	1.20			
E.O.H.								

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG - D.D.H. No. B300/7

- 0.00 - 0.30 m Biotite hornfels/pyroxene hornfels.  
Typical of footwall of B Lens marble but large amount of pyrite present in a silicified zone over the last 20 cm.
- 0.30 - 23.05 m Barren marble  
Dark grey, well bedded, recrystallised marble showing considerable amounts of mobilization.  
Bedding is at 54° LCA at 14.9 m  
48° LCA at 20.5 m
- 23.05 - 24.56 m Garnet pyroxene skarn  
A partially replaced portion of the above marble adjacent to its contact with the pelitic sediments. Mineralisation present throughout with a small vein at 24.09 m.
- 24.56 - 26.16 m Biotite pyroxene hornfels  
Initially well bedded but from 57.42 m on heavily broken and iron stained. The contact between this unit and the next could be a fault.
- 26.16 - 56.00 Volcanics  
Initially this unit is extremely micaceous, sheared and broken with chlorite on the joints.  
Below about the 28 m marble the mica content drops markedly and the volcanics become grey green in colour with spotting becoming increasingly apparent in the core.  
From 36.4 m to 38.2 m the core is again heavily broken with a number of possible fault zones present. A definite fault is present between 36.4 m and 36.6 m.  
From 38.2 m to 56.0 m the volcanics are dominantly grey green with well developed spots except as follows:  
38.75 - 39.37 - zone of silicification, brown purple in colour. Some areas almost aplite in texture.  
41.75 - 43.00 - zone of silicification, purple brown in colour, well developed clasts present throughout.  
Thin section to be made - 42.7 m

E.O.H.

DDH BH 300/7  
0.00 — 12.95 m.

DDH BH 300/7  
12.95 — 25.64 m.

DDH BH 300/7  
25.64 — 38.87 m.

DDH BH 300/7  
38.87 — 52.40 m.



DDH BH 300/7  
E.O.H.  
52.40 - 56.00 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 300/6 Bold Head

PLANNING PROPOSER: C. Kendall DEPTH: 100 m  
LOCATION: Decline Face  
PURPOSE OF HOLE: Test ground conditions ahead of Decline  
PROPOSED CO-ORDS: 40 306 E 10 312.0 N  
INCLINATION: -8  
BEARING: 207 °Grid °Mag  
TARGET: E N  
DEPTH:  
CHECKED BY: S.G. Brown DATE: 10.01.82

SURVEY SURVEY CO-ORDS: E N  
SURVEYED BEARING: °Grid °Mag  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40 306.01 E 10 310.47 N  
R.L. OF COLLAR: 863.15  
INCLINATION OF HOLE:  
PICKED UP BY: B. Lennon DATE: 03.02.82

SUMMARY LOGGED BY: G. Brown  
RESULTS: 21.0 to 24.0 m - 3 m @ 0.68% WO3  
B Lens Mineralisation

DRILLING DATE COMMENCED: 20.01.82 DATE TERMINATED: 26.01.82  
DRILLER/CONTRACTOR: A.D.D.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE: 46TT  
DEPTH: 51.5  
WEDGE PLACED: DEPTH: PROPOSER:  
EXTENSION: Nil  
FINAL DEPTH: 51.50  
REASON FOR TERMINATION: Well into volcanics  
CONDITION OF HOLE ON COMPLETION:  
CASING:  
CEMENTED: No  
BORE HOLE SURVEY: M/shot  
WATER:  
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. 300/6 Bold Head

Surveyed method: M/S  
Final depth: 51.50  
Casing depth: Nil

Depth surveyed to: 51.50  
Date surveyed: 22.1.82  
Surveyed by: R. Drake  
Checked by: G. Brown

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.		N	E
25.00	203°30'	S5°E	82°	-8	3.48	10287.77	40296.31
51.50	207°30'	S9°E	82°	-8	7.17	10262.47	40287.81

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 300/6 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.20	3.20	2.95	92
3.20 - 6.00	2.80	2.65	95
6.00 - 9.00	3.00	2.80	93
9.00 - 12.00	3.00	3.00	100
12.00 - 15.00	3.00	2.95	90
15.00 - 18.00	3.00	3.00	100
18.00 - 21.00	3.00	2.90	97
21.00 - 24.00	3.00	3.00	100
24.00 - 27.00	3.00	2.95	90
27.00 - 30.00	3.00	2.90	97
30.00 - 32.50	2.50	2.50	100
32.50 - 34.70	2.20	2.10	95
34.70 - 37.10	2.40	2.40	100
37.10 - 39.40	2.30	2.30	100
39.40 - 40.00	0.60	0.60	100
40.00 - 41.00	1.00	1.00	100
41.00 - 43.80	2.80	2.75	96
43.80 - 45.80	2.00	1.95	98
45.80 - 48.70	2.90	2.80	97
48.70 - 51.50	2.80	2.60	93
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 300/6 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 8803	16.0	17.0	1.0	1.0	0.07			
8804	17.0	18.0	1.0	1.0	0.26			
8805	18.0	19.0	1.0	1.0	0.28			
8806	19.0	20.0	1.0	1.0	0.25			
8807	20.0	21.0	1.0	1.0	0.22			
8808	21.0	22.0	1.0	1.0	1.40			
8809	22.0	23.0	1.0	1.0	0.06			
8810	23.0	24.0	1.0	1.0	0.58			
8811	24.0	25.0	1.0	1.0	0.16			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

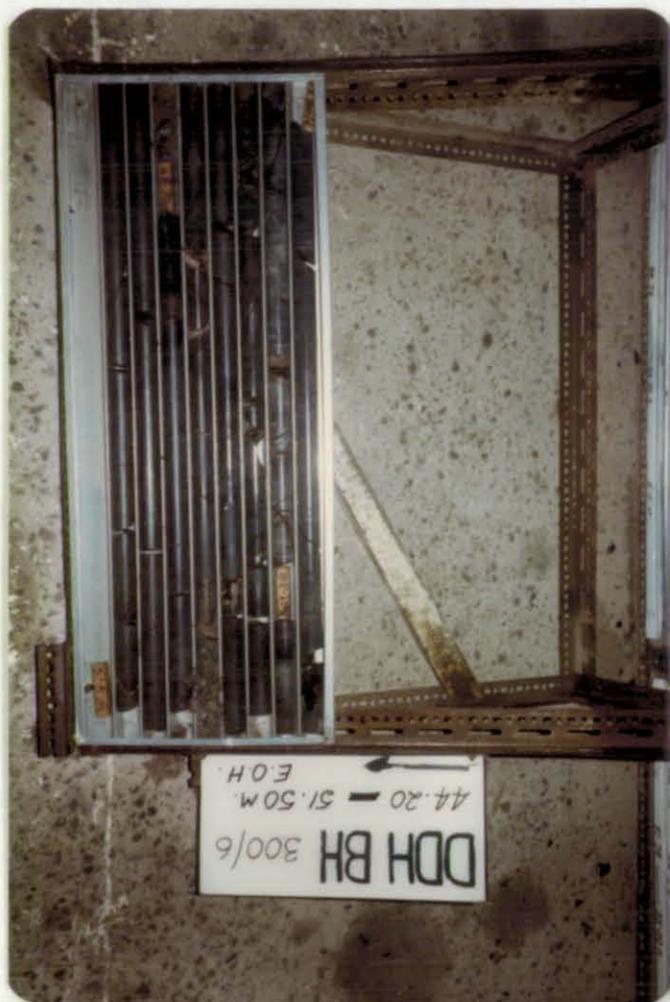
GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 300/6 Bold Head

- 0.0 m - 16.3 m Marble.  
Blue grey crystalline marble, heavily recrystallised from 7.0 to 8.8 m. Some grossular garnets associated with this area.  
Jointing within the marble is very regular (Direction  $50^{\circ}$  LCA). Most joints are calcite filled and are very crumbly.  
Bedding at 13.0 m  $60^{\circ}$  LCA.
- 16.3 - 22.20 m Garnet skarn.  
Andradite garnet skarn, well mineralised. Numerous small quartz veins cut the sequence at random angle.  
Molybdenite present at 20.94 m in association with an aplite dyke and at 21.50 m again associated with the other contact of this dyke.
- 22.20 - 23.40 m Marble.  
Blue grey recrystallised "B" lens marble.  
Bedding at 23.0 m @  $25^{\circ}$  LCA.
- 23.40 - 24.62 m Garnet skarn.  
Andradite garnet skarn as above - well mineralised.
- 24.62 - 24.80 m Biotite pyroxene hornfels.  
A very small band of bph with possible bedding at  $45^{\circ}$  LCA.
- 24.80 - 51.50 m Upper Volcanics.  
From 24.80 to 31.08 m the volcanics are very micaceous in nature, green in colour and with well developed spotting.  
From 30.38 to 32.50 m the core is heavily broken and probably contains a fault zone of some size.  
From 32.50 - 51.50 m the upper volcanics are much less rich in mica, apparently more quartz rich and with only some zones of spotting developed here.
- 
- At 41.78 m a small pod containing grossularite is present.
- Between 37.40 and 38.81 m the core is a brownish grey colour, very quartz rich and would in other associations be logged as a normal quartzite.

E.O.H.



DDH BH 300/6  
44.20 - 51.50 M.  
E.O.H.



DDH BH 300/6  
30.38 - 44.20 M.



DDH BH 300/6  
15.97 - 30.38 M.



DDH BH 300/6  
0.00 - 15.97 M.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 300/5

PLANNING

PROPOSER: J. M. Clark DEPTH: 150m  
LOCATION: Q42 Drill Drive  
PURPOSE OF HOLE: Test fault block  
PROPOSED CO-ORDS: 40375 E 10300 N  
INCLINATION:  $-82.5^{\circ}$   
BEARING:  $270^{\circ}$  GRID MAG  
TARGET: E N  
DEPTH:  
CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N  
SURVEYED BEARING:  $273^{\circ} 12'$  GRID MAG  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40377.34 E 10300.85 N  
R.L. OF COLLAR: 951.4  
INCLINATION OF HOLE:  $-82.6$   
PICKED UP BY: B. Lennon DATE: 1.6.79

SUMMARY

LOGGED BY: R. E. S. Davies  
RESULTS: 18- 21m, 3m @ 0.77%  $WO_3$   
119-128m, 9m @ 0.73%  $WO_3$   
142-144m, 2m @ 1.08%  $WO_3$

DRILLING

DATE COMMENCED: 31/5/79 DATE TERMINATED: 16/8/79  
DRILLER/CONTRACTOR: K.I.S.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE:  
DEPTH:  
WEDGE PLACED: DEPTH: PROPOSER:  
EXTENSION:  
FINAL DEPTH: 148.5m  
REASON FOR TERMINATION: Finished in adamallite  
CONDITION OF HOLE ON COMPLETION:  
CASING:  
CEMENTED:  
BORE HOLE SURVEY:  
WATER:  
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 300/5

Surveyed method: Multishot  
 Final depth: 148.5  
 Casing depth: 1m

Depth surveyed to: 121.0m  
 Date surveyed: 17/8/79  
 Surveyed by: L. Denby  
 Checked by: R. E. S. Davies

Depth (m)	Bearing.		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.		S	W
4	265°	237°	7° 30'	-88° 30'	3.97	.05	.52
19	270°	242°	7° 45'	-88° 15'	18.83	.05	2.54
28	270°	242°	7° 30'	-88° 30'	27.75	.05	4.25
49	270°	242°	7° 15'	-88° 45'	48.58	.05	6.90
64	270°	242°	7° 15'	-88° 45'	63.46	.05	8.79
73	273°	245°	8°	-88° 32'	72.37	.02	10.04
85	273°	245°	8°	-88° 32'	84.25	.11	11.71
97	270°	242°	7° 45'	-88° 15'	96.14	.11	13.33
118	268°	240°	7° 15'	-88° 45'	116.97	.20	15.98
121	268°	240°	7° 15'	-88° 45'	119.95	.21	16.36
148.5	268°	240°	7° 15'	-88° 45'	147.23	.33	19.83

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.4	2.4	1.8	90
2.4 - 3.4	1.0	0.3	30
3.4 - 5.5	1.9	1.9	100
5.5 - 6.5	1.0	1.0	100
6.5 - 11.5	5.0	5.0	100
11.5 - 13.4	1.9	1.9	100
13.4 - 16.0	2.6	2.5	96
16.0 - 18.0	2.0	2.0	100
18.0 - 20.4	2.4	2.4	100
20.4 - 22.2	1.8	1.8	100
22.2 - 24.5	2.3	2.3	100
24.5 - 26.2	1.7	1.7	100
26.2 - 29.7	3.5	3.5	100
29.7 - 30.7	1.0	1.0	100
30.7 - 32.7	2.0	2.0	100
32.7 - 35.2	2.5	.25	100
35.2 - 37.2	2.0	0.5	25
37.2 - 39.6	2.4	2.4	100
39.6 - 43.0	3.4	3.4	100
43.0 - 44.4	1.4	1.4	100
44.4 - 45.7	1.3	1.3	100
45.7 - 48.6	2.9	2.9	100
48.6 - 51.0	2.4	2.4	100
51.0 - 54.6	3.6	3.6	100
54.6 - 57.2	2.8	2.8	100
57.2 - 57.7	0.5	0.5	100
57.7 - 60.2	2.5	2.1	84
60.2 - 62.2	2.0	2.0	100
62.2 - 65.5	3.3	3.3	100
65.5 - 68.3	2.8	2.8	100
68.3 - 70.0	1.7	1.7	100
70.0 - 72.5	2.5	2.5	100
72.5 - 73.3	0.8	0.8	100
73.3 - 76.7	3.4	3.1	91
76.7 - 77.5	0.8	0.8	100
77.5 - 81.0	3.5	3.5	100
81.0 - 83.2	2.2	1.8	82
83.2 - 84.3	1.1	1.1	100
84.3 - 87.1	2.8	2.8	100
87.1 - 89.1	2.0	2.0	100
89.1 - 90.7	1.6	1.6	100
90.7 - 92.2	1.5	1.5	100
92.2 - 93.5	1.3	1.3	100
93.5 - 96.0	2.5	2.5	100
96.0 - 99.2	3.2	3.2	100
99.2 - 101.8	2.6	2.6	100
101.8 - 104.8	3.0	3.0	100
104.8 - 106.8	2.0	2.0	100
106.8 - 108.4	1.6	1.6	100
108.4 - 110.6	2.2	2.2	100
110.6 - 112.6	2.0	2.0	100
112.6 - 114.0	1.4	1.3	93

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
114.0 - 116.0	2.0	2.0	100
116.0 - 119.0	3.0	3.0	100
119.0 - 122.0	3.0	3.0	100
122.0 - 125.0	3.0	3.0	100
125.0 - 128.2	3.2	3.2	100
128.2 - 130.6	2.4	2.4	100
130.6 - 134.2	3.8	3.8	100
134.2 - 136.4	2.2	1.7	77
136.4 - 138.5	2.1	1.7	81
138.5 - 139.1	0.6	0.6	100
139.1 - 142.1	3.0	3.0	101
142.1 - 144.2	2.1	2.1	100
144.2 - 145.0	0.8	0.6	75
145.0 - 145.6	0.6	0.6	100
145.6 - 146.7	1.1	1.1	100
146.7 - 148.5	1.8	1.8	100
EOH 148.5m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 7719	15	16	1.0	1.0	0.03	0.01		
20	16	17	"	"	0.05	0.01		
21	17	18	"	"	0.08	<0.01		
22	18	19	"	"	0.98	0.02		
23	19	20	"	"	0.56	0.03		
24	20	21	"	"	0.76	0.02		
25	21	22	"	"	0.01	<0.01		
26	22	23	"	"	0.01	0.01		
27	47	48	"	"	<0.01	<0.01		
28	80	81	"	"	<0.01	0.01		
29	81	82	"	"	0.01	<0.01		
30	82	83	"	"	<0.01	0.01		
64	108	109	"	"	<0.01	0.01		
65	109	110	"	"	<0.01	<0.01		
66	110	111	"	"	0.38	0.01		
67	111	112	"	"	<0.01	0.01		
68	112	113	"	"	<0.01	0.01		
69	113	114	"	"	0.04	0.01		
70	114	115	"	"	0.03	0.01		
71	115	116	"	"	0.37	0.03		
72	116	117	"	"	<0.01	<0.01		
73	117	118	"	"	<0.01	<0.01		
74	118	119	"	"	0.08	0.01		
75	119	120	"	"	0.46	0.02		
76	120	121	"	"	0.90	0.03		
77	121	122	"	"	0.81	0.02		
78	122	123	"	"	0.45	0.02		
79	123	124	"	"	0.97	0.03		
80	124	125	"	"	0.60	0.02		
81	125	126	"	"	0.65	0.01		
82	126	127	"	"	1.17	0.01		
83	127	128	"	"	0.54	0.01		
84	128	129	"	"	<0.01	<0.01		
85	129	130	"	"	0.26	<0.01		
86	130	131	"	"	0.12	<0.01		
87	131	132	"	"	0.03	<0.01		
88	132	133	"	"	0.01	<0.01		
89	133	134	"	"	0.02	<0.01		
90	134	135	"	"	0.01	<0.01		
91	135	136	"	"	<0.01	<0.01		
92	136	137	"	"	<0.01	<0.01		
93	137	138	"	"	0.01	<0.01		
94	138	139	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 7795	139	140	1.0	1.0	< 0.01	< 0.01		
96	140	141	"	"	0.02	< 0.01		
97	141	145	"	"	0.02	0.01		
98	142	143	"	"	0.39	0.01		
99	143	144	"	"	1.77	0.02		
7800	144	145	"	"	0.09	0.02		
01	145	146	"	"	0.01	< 0.01		
02	146	167	"	"	0.01	< 0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

0.00 - 13.35m BIOTITE HORNFELS

Biotite hornfels, dark, grey black fine grained and massive, constitutes approximately 70% of this unit. The remainder is mostly pale green, fine grained pyroxene hornfels interbedded with the biotite hornfels.

The unit is disturbed in places eg 7.8 m. Grossular garnet is rarely developed in the pyroxene hornfels eg. 8 m.

Bedding at 58° to LCA @ 10m

The core is mostly broken and contains a number of major joints some open eg 4.4m and others re-cemented eg 9.5m.

No mineralisation.

13.35 - 16.6 FAULT ZONE

Here the core is extremely broken and fractured some almost to silt size. Slickenslides, although present are not common.

The lithology is biotite hornfels and is not mineralised.

16.6 - 21.5 GARNET HORNFELS

This unit is not homogeneous but is uniformly mineralised at around 0.7%  $WO_3$  (visual).

A 5cm section at 16.9m is extensively leached and has a honey comb network of vughs and cavities. The following 80m has podded/disturbed like appearance with lcm pods of calcite in a pyroxene, andradite matrix. This is followed by normal brown medium grained andradite skarn with calcite veins.

One part of this however has a background of biotite hornfels.

21.5 - 31.7 FRACTURED BIOTITE HORNFELS

This unit is characterised by its extreme brokenness and small size of recovered core.

It is best subdivided:

21.5 - 23.0 Biotite hornfels with many joints parallel to LCA, very broken core.

23.0 - 24.4 ?Leached aplite. A competent rock, mostly white with some red iron oxidation stains and brown alteration mineral. It contains considerable mica.

24.4 - 31.7 ?Fault zone, broken biotite hornfels in this section also disturbed and brecciated with re-cemented fractures. Much of the core is lcm and some is Sand Size. Slickenslides are present.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

There is no mineralisation. Some fragments display open crystal lined cavities.

A 1.5 m wide fresh aplite dyke occurs @ 25.2 m.

31.5 - 42.5

PYROXENE HORNFELS

With the exception mentioned below, this unit is a medium grained green disturbed rock. It is competent and unmineralised.

From 37.3m - 38.5m, a light grey fine grained marble is inter-bedded.

Possible faults @

32.6 - 32.7m Loose and broken core with clays.

35.2 - 37.2 Broken core and clay/slickensides and great loss of core.

@ 40.3 Broken core and clays.

42.5 - 47.3

BIOTITE HORNFELS

This unit changes slightly from top to bottom. The upper portion is fine - medium grained/a grey green colour and a speckled appearance - perhaps due to recrystallised sand grains. It is unmineralised and has no bedding.

At the base of the unit the biotite hornfels is a fine grained black uniform rock with traces of bedding.

45.4 - 45.6m Aplite dyke.

A number of large joints are present in the interval 44 - 46m and some cavities are visible.

Bedding  $44^{\circ}$  to LCA @ 46.8m

47.3 - 56.25

CALC HORNFELS

This rock is mostly a uniform medium grained, light grey marble commonly showing bedding.

Except for the first 30m it is unmineralised. The upper 30m is a layer of andradite skarn with a trace of scheelite, it is associated with pyroxene hornfels and grossular garnet.

~~The basal 20m of the marble is megacrystalline calcite (0.5cm)~~

~~Fault occur at:~~

50.6 - 51.05m Loose broken core with clay.

52.4 - 52.9 Loose broken core with clay -- altered to talc

Bedding  $43^{\circ}$  to CLA @ 49m  
 $46^{\circ}$  54.55m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

56.25 - 71.85 BIOTITE HORNFELS

This unit is mostly uniform, varying slightly in colour from black - light grey, dark green. It is fine grained throughout and although bedding is rare vague interbanding is present.

There is no mineralisation. Metamorphic spotting is developed @ 67m.

The unit is separated from the overlying marble by a fault, marked by an 8cm wide zone of silt clayey core which is also sheared.

Some pyroxene hornfels is present in the first 1m.

From 58.3 - 59.2 is a conspicuous zone of banded/podded pyroxene hornfels/biotite hornfels. Thin discontinuous stringer of pyroxene hornfels (0.5cm) are present in a biotite hornfels matrix having a slight purplish tinge.

They are parallel and have an orientation of  $33^{\circ}$  to LCA.

71.88 - 76.7 BIOTITE HORNFELS

Dark grey to black, fine grained biotite hornfels. It is disturbed but shows some bedding.

This is unmineralised.

Bedding  $40^{\circ}$  to LCA @ 75.76m

76.7 - 78.55 FAULT ZONE

*Discontinuously*  
This section of core is badly broken and consists mostly of rubble 2cm is size. Slickensides are present. The lithology is biotite hornfels, occasionally ironstained.

78.55 - 82.37 BANDED PYROXENE/GARNET HORNFELS

This unit has a pale green to light grey/brown colour, and has a moderate grain size. Some biotite hornfels is interbedded, notably towards the top, but bedding is disturbed.

A few specks of scheelite are present around 82m

Bedding  $51^{\circ}$  to LCA @ 79.3m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

- 82.37 - 84.4 APLITE  
A pink coloured aplite with moderate grain size around 2mm.
- 84.4 - 8.36 BANDED BIOTITE/PYROXENE HORNFELS  
This unit consists mostly of fine grained, black biotite hornfels. Interbedded are numerous thin (1cm) beds of pyroxene hornfels. They are often discontinuous.  
This unit is unmineralised.  
Bedding  $49^{\circ}$  to LCA @ 86.1  
 $64^{\circ}$  86.9
- 88.36 - 93.5 BIOTITE HORNFELS  
A dark grey fine grained biotite hornfels with some traces of pyroxene hornfels.  
There is no mineralisation.  
The core is broken and loose between 92.2 and 92.5m.
- 93.5 - 107.16 BIOTITE HORNFELS  
This is a massive, dark grey, fine grained rock. It is unmineralised.  
Aplites with a moderate grain size are present from 94 - 96.7m and from 103.7 - 105.88m.  
The base of the first aplite is well fractured and broken and contains a quartz vein.  
Bedding is uncommon in the biotite hornfels but was measured at  $44^{\circ}$  to LCA @ 102.7m.
- 107.16 - 108.4 PYROXENE HORNFELS  
This thin band is a rather fractured rock, although the cracks are now mostly resealed, they are indicated by iron staining.  
The body of the rock is green and fine grained but pods of other material, mostly garnet hornfels are present.  
There is no mineralisation.
- 108.4 - 109.55 APLITE  
This dyke has a greenish colour and appears fairly altered. Grain size is medium.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

109.55 - 110.3

GARNET HORNFELS

This is a thin band of well mineralised garnet skarn. It is medium grained and has a khaki brown colour. It appears slightly disturbed and has a slight podded aspect.

110.3 - 113.35

PYROXENE/BIOTITE HORNFELS

This dominantly green unit has pods and lenses of black biotite hornfels spread through it in a random fashion.

Some garnet hornfels is present but mineralisation is rare.

113.35 - 128.3

GARNET HORNFELS

For the most part this is a massive unit of khaki brown moderate grain size andradite hornfels which is well mineralised.

Numerous patches and veins of calcite are present.

The first 40cm of the unit consist of a fractured quartz vein in a rotted carbonate mush. Below this is 1.4m of andradite/quartz rock which is unmineralised.

10cm of fractured and rubbly core intermixed with clay occur at 116m.

An area of pyroxene hornfels is present from 119.8m - 1201m

128.1 - 144.0

BANDED FOOTWALL BEDS

This is a well bedded sequence containing marble, biotite hornfels, pyroxene hornfels and garnet hornfels in places well mineralised. It is cut by 2 major fracture zones.

The unit is best subdivided.

128.1 - 130.5 Interbedded biotite and pyroxene hornfels with grossular garnet. Mineralised garnet skarn (0.3%) veins in the last 30cm. The beds are frequently irregular and disrupted. Bedding is 65° to CLA at 128.3m

130.5 - 131.3 Fracture zone. This section consists of some quartz fragments (1cm) and much fine sand and silt sized material.

131.3 - 132.6 Garnet skarn with interbedded biotite hornfels. Poorly mineralised - 0.2%.

132.6 - 132.15 Biotite hornfels with some pyroxene hornfels interbedds. Bedding 74° to CLA @ 132.8m

134.15 - 135.45 Interbedded calc hornfels, biotite hornfels and grossular garnet. Some rare specks of scheelite present.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/5

135.45 - 139.1 Fractures zone. This consists in the first half of a small fragment (1-3cm) of Banded footwall beds in a very thick sticky clay. The lower half is mostly fragments and rubble, with some coarse sand grade material.

139.1 - 144.0 Garnet hornfels mostly massive though disturbed in places eg 140.5m. From 142.7 - 143.2 it is well bedded (68° to LCA) with pyroxene hornfels and grossular garnet. Mineralisation is generally patchy and poor (0.2) except for 143.5 - 143.8m where it is finely disseminated at 1%.

144.0 - 145.0 FRACTURED ZONE

This area consists of rubble approx. 2cm, some clay, very leached looking core fragments 8cm long. Rare specks of scheelite present.

145.0 - 146.1 BIOTITE HORNFELS

This unit is black and fine grained. It is well bedded with thin (5mm) bands of lighter brown coloured material. There is no mineralisation.

Bedding is 81° to LCA.

146.1 - 148.5 GRANITE

A coarse grained (0.5cm) fresh, equigranular intrusive. It has a sharp contact with the overlying biotite hornfels.

EOH 148.5m

GEOLOGY - KING ISLAND SCHEELITE

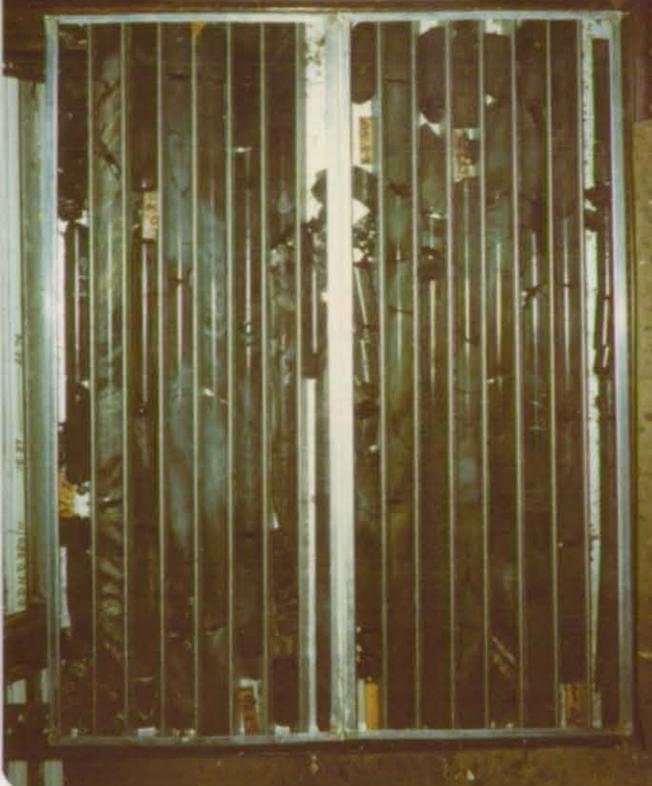
CHECK ASSAY DATA

D.D.H. No. BH 300/5

LAB. K.I.S.			LAB. K.I.S. CHECK			LAB. AMDEL			LAB. A.L.S.			
Original Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	
7722	0.98	0.02	8360	0.83	<0.01	8361	0.620		8362	0.52		
7766	0.38	0.01	8363	0.43	<0.01	8364	0.395		8365	0.31		
7775	0.46	0.02	8366	0.61	<0.01	8367	0.620		8368	0.51		
7785	0.26	<0.01	8369	0.14	<0.01	8370	0.180		8371	0.15		
7798	0.39	0.01	8372	0.45	<0.01	8373	0.560		8374	0.48		

DDH BH 300/5.

57.87 — 71.88 m.



DDH BH 300/5.

71.88 — 86.33 m.



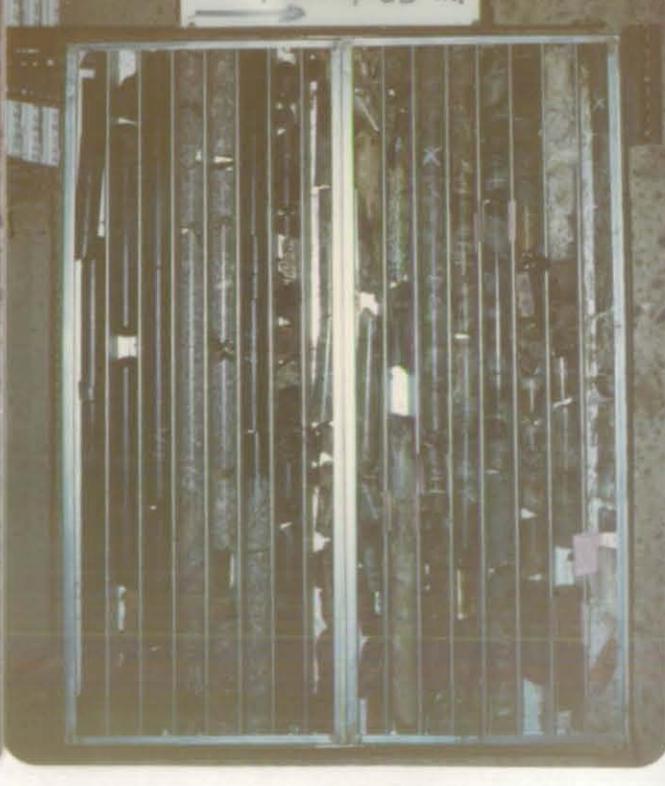
DDH BH 300/5

86.33 — 99.74 m.



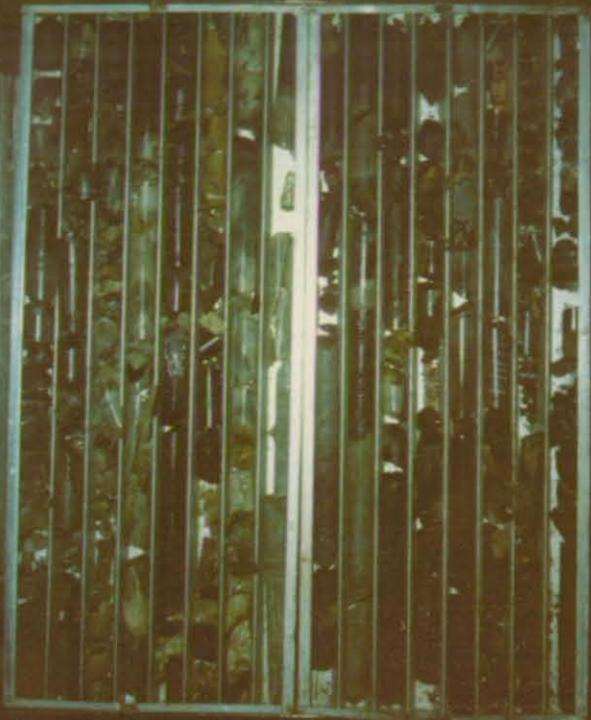
DDH BH 300/5

99.74 — 114.85 m.



DDH BH 300/5.

0.00 — 14.20 m.



DDH BH 300/5.

14.20 — 27.56 m.



DDH BH 300/5.

27.56 — 43.59 m.



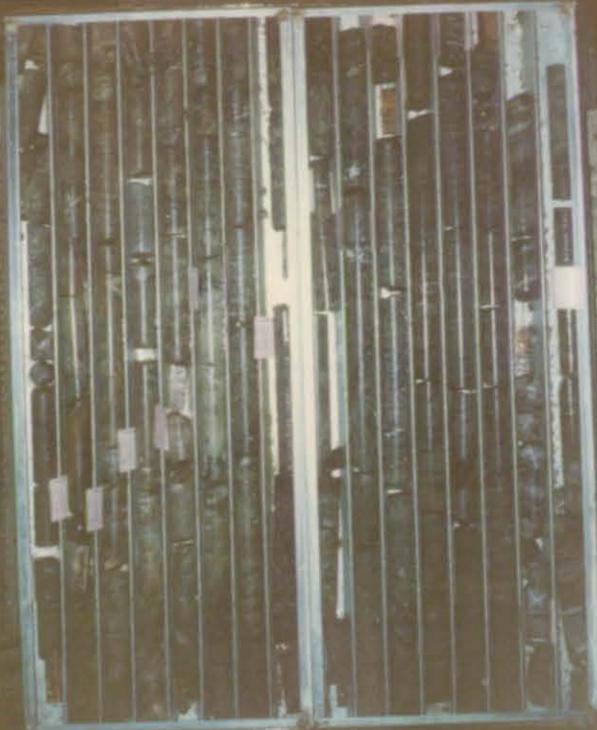
DDH BH 300/5.

43.59 — 57.87 m.



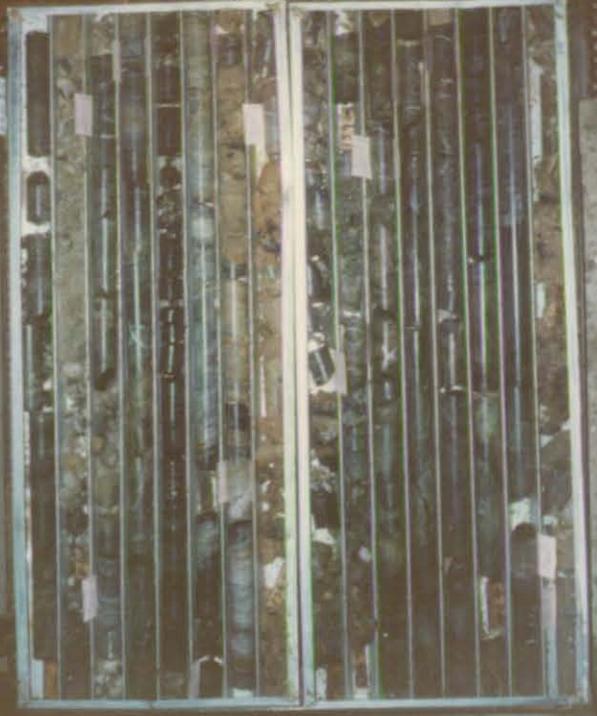
DDH BH 300/5

114.85 — 129.03m.



DDH BH 300/5

129.03 — 144.57m.



DDH BH 300/5

144.57 — 148.50m.

E.O.H.



GEOLOGY -- KING-ISLAND. SCHEELITE

LOG OF D.D.H. No. BH 300/4

PLANNING

PROPOSER: J. Clark

DEPTH: 70 m

LOCATION: Q42 Drive

PURPOSE OF HOLE: Test fault Block

CO-ORDS: 40375 E 10300 N

INCLINATION:  $-46^{\circ}$

BEARING: 090  $^{\circ}$  GRID  $^{\circ}$  MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING:  $90^{\circ} 40'$   $^{\circ}$  GRID  $^{\circ}$  MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40 379.0 E 10 300.8 N

R.L. OF COLLAR R4951.6

INCLINATION OF HOLE:  $-42^{\circ} 50'$

PICKED UP BY: R. Howard DATE: 18/5/79

SUMMARY

LOGGED BY: J. Clark

RESULTS:

No Significant mineralisation.

DRILLING

DATE COMMENCED: 10/5/79 DATE TERMINATED: 31/5/79

DRILLER/CONTRACTOR: K.I.S.

CASING: SIZE:  
DEPTH:

CORE: SIZE:  
DEPTH:

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 64.30m

REASON FOR TERMINATION: In quartzite

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 300/4

Surveyed method: Multishot  
 Final depth: 64.30m  
 Casing depth: 1.50m

Depth surveyed to: 58.0m  
 Date surveyed: 31/5/79  
 Surveyed by: L. Denby  
 Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read.	Corrected		S	E
10	092	64	45° 30'	-44.5°	7.01	0.25	7.13
22	092	64	45°	-45°	15.50	0.55	15.61
31	092	64	45	-45	21.86	0.77	21.97
43	091.5	63.5	44° 45'	-45.25°	30.38	0.84	30.42
49	091	63	44 45	-45.25	34.64	0.91	34.64
55	090	62	44 30	-45.5°	38.92	0.91	38.85
58	090	62	44 15	-45.75	41.07	0.91	40.94
64.3	090	62	44	-46	45.60	0.91	45.32

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.6	2.6	1.3	50
2.6 - 5.8	3.2	3.1	97
5.8 - 8.6	2.8	2.8	100
8.6 - 11.5	2.9	2.9	100
11.5 - 15.0	3.5	3.4	97
15.0 - 16.5	1.5	Nil	0
16.5 - 18.0	1.5	1.5	100
18.0 - 21.0	3.0	3.0	100
21.0 - 23.2	2.2	2.2	100
23.2 - 24.8	1.6	1.5	94
24.8 - 25.7	0.9	0.9	100
25.7 - 27.0	1.3	1.3	100
27.0 - 30.0	3.0	3.0	100
30.0 - 33.0	3.0	3.0	100
33.0 - 35.8	2.8	2.7	96
35.8 - 37.8	2.0	1.8	90
37.8 - 39.2	1.4	1.3	93
39.2 - 41.2	2.0	2.0	100
41.2 - 43.1	1.9	1.9	100
43.1 - 45.0	1.9	1.9	100
45.0 - 48.0	3.0	3.0	100
48.0 - 51.0	3.0	3.0	100
51.0 - 53.6	2.6	2.5	96
53.6 - 55.0	1.4	0.9	64
55.0 - 56.0	1.0	1.0	100
56.0 - 57.3	1.3	1.1	85
57.3 - 60.0	2.7	2.7	100
60.0 - 62.7	2.7	2.7	100
62.7 - 64.3	1.6	1.6	100

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 300/4

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
D 7084	11	12	1.0	1.0	0.01	0.01		
85	12	13	"	"	0.40	0.01		
86	13	14	"	"	0.04	0.03		
87	14	15	"	"	0.03	0.03		
88	45	46	"	"	0.03	0.03		
86	46	47	"	"	0.26	0.02		
90	47	48	"	"	0.19	0.01		
91	48	49	"	"	0.01	0.01		
92	49	50	"	"	0.03	0.01		
93	50	51	"	"	0.04	0.01		
94	51	52	"	"	0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/4

0.0 - 19.10m MARBLE

White, in places slightly sugary, marble has irregularly shaped aggregates of grossular garnet throughout. Veins containing calcite and a white swelling clay are common and have caused minor broken core.

Pyroxene-rich marble is present at 0.0 - 2.6m and 12.4 - 14.1m. The later interval contains irregular but moderate, fine grained disseminated scheelite.

14.1 - 16.6m White fine grained aplite core is moderately broken and considerable core has been lost.

17.5 - 19.1m Pyroxene-grossular calcite rock with several small beds of biotite hornfels. Scheelite is not present.

At 12.0m bedding is  $50^{\circ}$  to core axis.  
17.8m  $43^{\circ}$

Fractures/m = 9  
Recovery =

19.10 - 37.75 BIOTITE HORNFELS

Purplish brown biotite hornfels has minor spotting and occasional beds of pyroxene hornfels.

19.1 - 20.0m Interformational breccia containing light coloured rock fragments in a brown biotite rich matrix.

20.0 - 21.1 Pyroxene hornfels with minor grossular.

20.3 - 20.35m, 21.2 - 21.3m, 27.4 - 27.5m. Broken core associated with chlorite veins and slickensides

25.0 - 33.0 Minor ironstaining on fracture surfaces.

32.5 - 37.75 Broken core fracture surfaces are coated with chlorite and often slickensides and there are chlorite filled microfractures in the core. Several small pug zones are present.

36.6 - 37.0 White medium grained marble

Bedding is not present.

Fractures/m = 5-20  
Recovery =

37.75 - 53.60 ?PYROXENE-GARNET HORNFELS

This is a severely disturbed unit and chlorite filled microfracturing is common. Irregular aggregates of grossular + calcite are present in a matrix of pyroxene. (Locally rich in biotite or grossular/andradite). Minor ironstaining is present throughout. Fine grained disseminated scheelite occurs at 47.3 - 47.6m, 49.0 - 49.05m 51.1 - 51.2m but does not reach ore grade.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/4

38.7 - 39.0m, 41.1 - 41.2m Broken core with abundant chlorite.  
The latter zone has a small pug zone.

50.0 - 51.0 Faint likeness to bedding at 37° to core axis.

51.0 - 53.6 Severely disturbed pyroxene calcite rock which  
appears to be almost mylonitic (fragments up  
to 5mm diameter are aligned in very sheared matrix).  
Shearing is 18° - 45° to core axis.

Fractures/m = 11

Recovery =

53.60 - 64.30

QUARTZITE

Dark grey very fine grained quartzite which is mildly  
ironstained.

The beginning of the unit 53.6 - 53.8m is mildly broken, and  
with the disturbed rock at the base of the last unit represents  
The Boundary Fault.

Fractures/m = 5

Recovery =

EOH 64.30m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 300/4

LAB.		K.I.S.		LAB.		K.I.S. CHECK		LAB.			AMDEL		LAB.		A.L.S.	
Original Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo		
7085	0.40	0.01	8268	0.42	<0.01	8269	0.490		8270	0.44					895 p.p.m.	
7090	0.19	0.01	8271	0.13	<0.01	8272	0.120		8273							

DDH BH 300/4.

0.00 — 17.53 m.

DDH BH 300/4.

17.53 — 32.25 m.

DDH BH 300/4.

32.25 — 46.44 m.

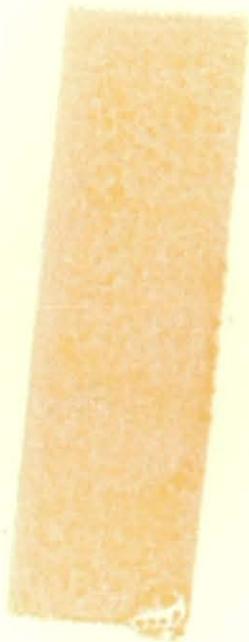
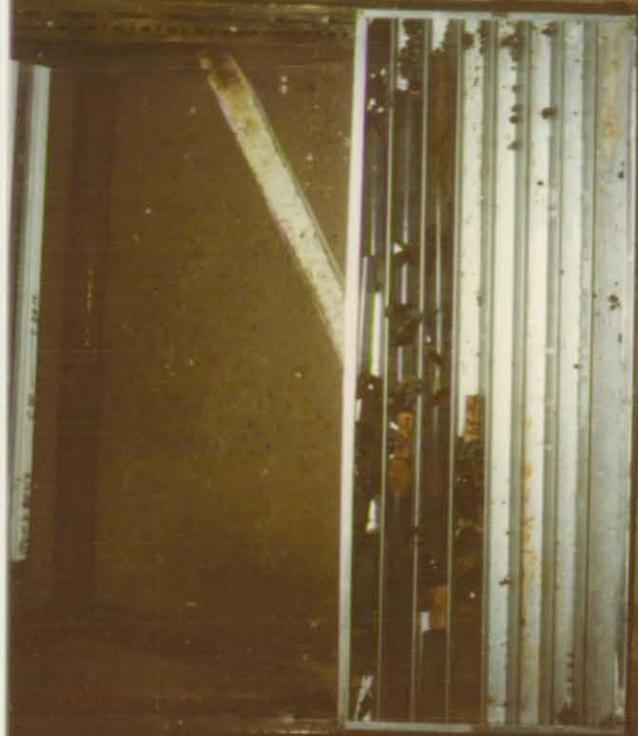
DDH BH 300/4.

46.44 — 61.35 m.

DDH BH 300/4.

61.35 - 64.30 m.

→ E.O.H.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.E.H. No. 300/3

PLANNING

PROPOSER: J. Clark DEPTH: 110m  
LOCATION: Q42 Drive  
PURPOSE OF HOLE: Test Fault Block  
CO-ORDS: 40375 E 10300 N  
INCLINATION: -65°  
BEARING: .090 °GRID °MAG  
TARGET: E N

SURVEY

SURVEY CO-ORDS: E N  
SURVEYED BEARING: 91°10' °GRID °MAG  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40378.23 E 10300.82 N  
R.L. OF COLLAR: 951.34  
INCLINATION OF HOLE: -63° 52'  
PICKED UP BY: M. Marchant DATE: 20/4/79

SUMMARY

LOGGED BY: J. Clark  
RESULTS: 53-58m, 5m @ 0.56% WO<sub>3</sub>  
60-62m, 2m @ 0.52% WO<sub>3</sub>  
92-95m, 3m @ 1.02% WO<sub>3</sub>

DRILLING

DATE COMMENCED: 12/4/79 DATE TERMINATED: 31/5/79  
DRILLER/CONTRACTOR: K.I.S.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE:  
DEPTH:  
WEDGE PLACED: DATE:  
EXTENSION:  
FINAL DEPTH: 102.4m  
REASON FOR TERMINATION: Hole abandoned because of clay  
CONDITION OF HOLE ON COMPLETION:  
CASING:  
CEMENTED:  
BORE HOLE SURVEY:  
WATER:  
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/3

Sample No.	DEPTH (Metre)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO <sub>3</sub>	Mo		
BH 7001	42	43	1.0	1.0	<0.01	<0.01		
02	43	44	"	"	0.06	<0.01		
03	44	45	"	"	<0.01	<0.01		
04	45	46	"	"	<0.01	<0.01		
05	46	47	"	"	<0.01	<0.01		
06	47	48	"	"	<0.01	<0.01		
07	48	49	"	"	<0.01	<0.01		
08	49	50	"	"	<0.01	<0.01		
09	50	51	"	"	<0.01	<0.01		
10	51	52	"	"	<0.01	<0.01		
11	52	53	"	"	<0.01	<0.01		
12	53	54	"	"	0.45	0.01		
13	54	55	"	"	0.34	0.02		
14	55	56	"	"	0.88	0.03		
15	56	57	"	"	0.43	0.02		
16	57	58	"	"	0.70	0.02		
17	58	59	"	"	<0.01	<0.01		
18	59	60	"	"	<0.01	<0.01		
19	60	61	"	"	0.62	0.02		
20	61	62	"	"	0.42	0.01		
21	62	63	"	"	<0.01	<0.01		
22	63	64	"	"	0.04	<0.01		
23	64	65	"	"	<0.01	<0.01		
24	65	66	"	"	<0.01	<0.01		
25	66	67	"	"	<0.01	<0.01		
26	67	68	"	"	<0.01	<0.01		
27	68	69	"	"	<0.01	<0.01		
28	69	70	"	"	0.03	<0.01		
29								
30	91	92	"	"	0.01	<0.01		
31	92	93	"	"	1.39	0.02		
32	93	94	"	"	0.98	0.02		
33	94	95	"	"	0.68	0.01		
34	95	96	"	"	0.21	0.01		
35	96	97	"	"	0.35	0.01		
	97	98	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres);  
 Rock Type :  
 S.G. :

Determined by:

GEOLOGY -- KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.8	2.8	2.2	79
2.8 - 6.0	3.2	3.1	97
6.0 - 9.0	3.0	3.0	100
9.0 - 12.0	3.0	3.0	100
12.0 - 15.0	3.0	2.9	100
15.0 - 17.9	2.9	2.8	97
17.9 - 21.2	3.3	3.3	100
21.2 - 23.9	2.7	2.7	100
23.9 - 27.1	3.2	3.2	100
27.1 - 30.9	3.8	3.8	100
30.9 - 33.1	2.8	1.6	57
33.1 - 36.0	2.9	2.7	93
36.0 - 39.1	3.1	3.1	100
39.1 - 42.1	3.0	3.0	100
42.1 - 45.1	3.0	3.0	100
45.1 - 48.1	3.0	3.0	100
48.1 - 51.1	3.0	2.8	100
51.1 - 53.8	2.7	2.7	100
53.8 - 56.1	2.3	2.6	113
56.1 - 59.1	3.0	3.0	100
59.1 - 62.1	3.0	3.0	100
62.1 - 64.0	1.9	1.9	100
64.0 - 66.0	2.0	2.0	100
66.0 - 69.1	3.1	3.1	100
69.1 - 71.5	2.4	2.3	96
71.5 - 72.1	0.6	0.5	83
72.1 - 74.4	2.3	2.3	100
74.4 - 76.1	1.7	1.6	94
76.1 - 78.1	2.0	1.6	80
78.1 - 80.9	2.8	1.0	36
80.9 - 81.7	0.8	0.6	75
81.7 - 84.0	2.3	1.5	65
84.0 - 86.6	2.6	2.4	92
86.6 - 87.3	0.7	0.7	100
87.3 - 88.8	1.5	1.5	100
88.8 - 91.1	2.3	2.3	100
91.1 - 93.0	1.9	1.4	74
93.0 - 96.0	3.0	3.0	100
96.0 - 97.8	1.8	1.8	100
97.8 - 101.0	3.2	0.4	13
101.0 - 101.4	0.4	0.2	50
101.4 - 101.9	0.5	0.3	60
101.9 - 102.4	0.5	0.1	20

GEOLOGY - KING ISLAND - SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 300/3

Survey method: Multishot  
 Final depth: 102.4m  
 Casing depth: 1.5m

Depth surveyed to: 102.4 m  
 Date surveyed: 31/5/79  
 Surveyed by: L. Denby  
 Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read.	Corrected		S	E
7	092	64	26	-64°	6.29	0.11	3.07
16	090	62	25°45'	64.25°	14.40	0.11	6.98
25	091	63	25°15'	64.75°	22.54	0.18	10.82
37	091.5	63.5°	25°	65°	33.42	0.31	15.89
46	092	64	25°	65°	41.58	0.44	16.69
52	092	64	24°45'	65.25°	47.03	0.51	22.20
67	091	63	24°15'	65.25°	60.65	0.62	28.47
76	092	64	24°30'	65.5°	68.84	0.75	32.20
82	091.5	63.5	24°30'	65.5°	74.30	0.82	34.69
88	092	64°	24°30'	65.5°	79.76	0.91	37.18
97	092	64	24°15'	65.75°	87.97	1.04	40.88
102.4	092	64	24°15'	65.75	92.89	1.12	43.10

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/3

0.0 - 20.3m MARBLE

A variable unit consisting of impure marble and calcite-rich pyroxene hornfels. Occasional small flecks of scheelite are sparsely distributed.

The top of the unit (0-60m) is pyroxene hornfels with moderate amounts of grossular. This grades into a pyroxene - grossular - calcite rock (in places similar to pyroxene garnet hornfels) and then into marble below 12.0m.

14.0 - 18.3m Aplite fine grained pink to white aplite with zones of darker pink to red ironstaining along some fractures. The aplite has more fractures/metre (20) than the rest of the unit.

Fractures/m = 7  
Recovery = 96%

20.30 - 43.30m BIOTITE HORNFELS

Brown biotite hornfels with minor interbedded pyroxene hornfels. The unit is slightly weathered as some fractures are coated with red ironoxides.

20.3 - 21.2m, 21.5 - 22.1m. Interformational breccia containing light and dark brown fragments in a biotite rich matrix. The fragment size becomes smaller down the unit.

21.2 - 21.5m, 22.1 - 22.5m. Pyroxene hornfels containing minor biotite, grossular and calcite.

30.9 - 36.1m Core is moderately broken and ironstained. There has been considerable core loss over this interval but there is no distinct fault zone. A broken aplite dyke is present between 32.3 - 32.7m.

At 29.2m bedding is 30° to core axis  
30.9m 40°  
41.0m 75°

Fractures/m = 7  
Recovery = 94%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/3

43.30 - 57.70m PYROXENE GARNET HORNFELS

Calcite and calcite/grossular pods are present in a matrix of pyroxene grossular and calcite. The pods are typically 1cm diameter but may be as large as 3cm.

43.3 - 53.3m Very sparsely disseminated fine to medium grained scheelite.

53.3 - 57.7m Thickly disseminated scheelite is present over most of this interval with barren patches up to 30cm long. The matrix here is andradite-rich and calcite pods are small.

50.4 - 50.7m Broken core with minor core loss.

Fractures/m = 4  
Recovery = 100%

57.70 - 60.40m MARBLE

Medium to coarse grained white marble with small stringers of pyroxene and/or grossular at 30° to core axis.

Scheelite is not present.

Fractures/m = 7  
Recovery = 100%

60.40 - 69.80m BANDED FOOTWALL BEDS

Interbedded marble pyroxene and garnet hornfels. Fine grained thickly disseminated scheelite is present in andradite garnet hornfels between 60.4 - 61.2m. Grossular garnet is more abundant in the remainder of the unit and only isolated specks of scheelite are present.

Swelling calcite/clay veins have disrupted core between 64.6 - 64.7m.

Bedding is uniform at 35° to core axis.

Fractures/m = 6  
Recovery = 100%

GEOLOGY -- KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/3

69.80 - 92.10m BIOTITE HORNFELS

Purplish brown biotite hornfels with lesser amounts of interbedded pyroxene hornfels and marble. The unit is intensely weathered with all marble units, and many fractures being ironstained.

Core is very broken and there has been moderate amounts of core lost. The broken core appears to be caused by both weathering and solution of marble beds and by zones of intense calcite veining.

70.8 - 71.3m Broken core. Chlorite slickensides and calcite veinlets are present.

75.2 - 76.1m Broken core in ?calcite bed.

85.2 - 86.8m Intensely broken core which has been brecciated by chlorite veining. Talc is present on fracture surfaces between 86.1 - 86.5m.

Towards the base of the unit some weathered marble beds contain minor grossular garnet.

At 73.6m bedding in  $27^{\circ}$  to core axis.

84m	$25^{\circ}$
88.2m	subparallel
89.0m	$23^{\circ}$

Fractures/m =  $<20$   
Recovery = 81%

92.10 - 97.20m ?GARNET HORNFELS

This is a very weathered unit with intense ironstaining. It consists of andradite garnet with minor calcite and pyroxene. Fine grained moderately disseminated scheelite is present between 92.1 - 96.5m (from 96.5 - 97.2m a pyroxene rich garnet hornfels has no scheelite).

Core is moderately broken at 92.3 - 93.0m (core loss) and 95.2 - 96.0m.

Bedding is not present and calcite veins are abundant.

Fractures/m =  $6-20$   
Recovery = 90%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/3

97.20 - 102.40 m BIOTITE HORNFELS

This is a very broken unit in which poor core recovery was obtained. Brown biotite hornfels is recovered as fragments below 97.6m. Clay zones are present and minor aplite has been recovered.

Fractures/m = 20  
Recovery = 31%

EOH 102.4m

Hole abandoned because of clay.

GEOLOGY - KING ISLAND SCHEELITE

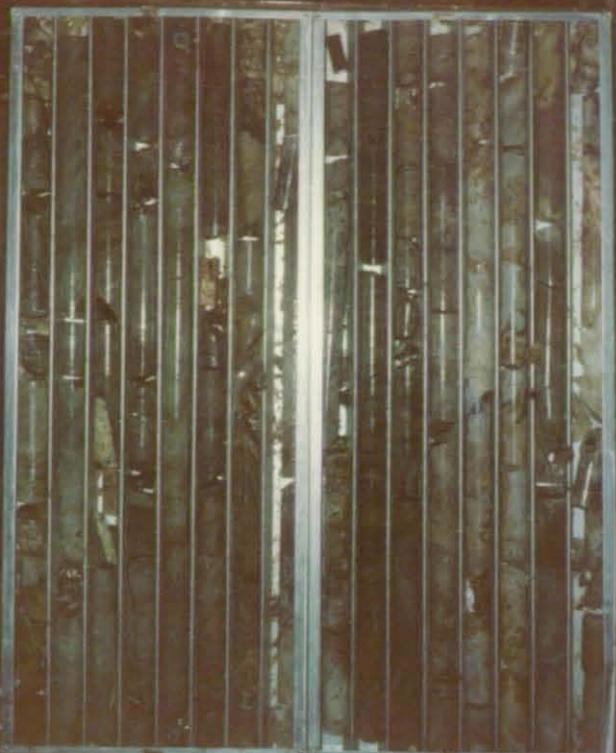
CHECK ASSAY DATA

D.D.H. No. BH 300/3

LAB. K.I.S.			LAB. K.I.S. CHECK			LAB. AMDEL			LAB. A.L.S.			
Original Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	Check Sample No	WO <sub>3</sub>	Mo	
7012	0.45	0.01	8259	0.51	<0.01	8260	0.495		8261	0.52		
7020	0.42	0.01	8262	0.54	<0.01	8263	0.460		8264	0.55		
7030	1.39	0.02	8265	0.97	<0.01	8266	1.19		8267	1.11		

DDH BH 300/3

0.00 — 15.60 m.



DDH BH 300/3

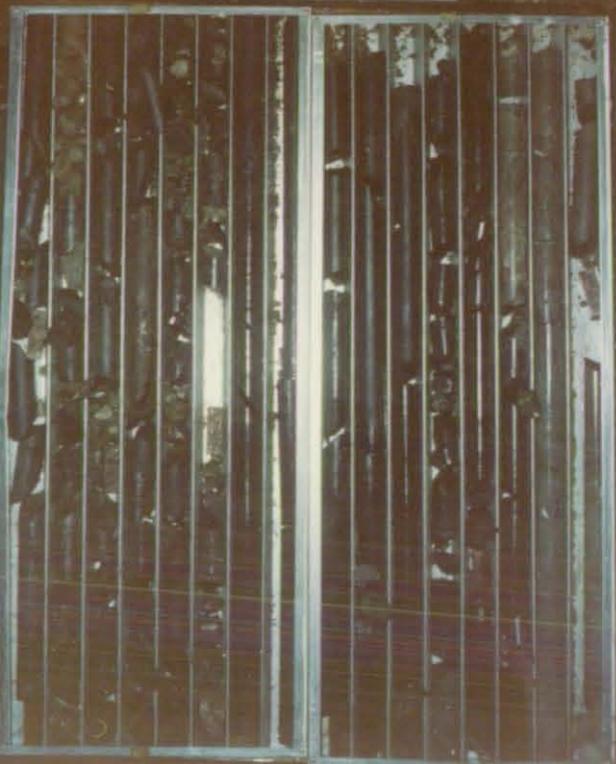
15.60 — 30.44 m.



DDH BH 300/3

30.44 — 45.32 m.

45.32 m.

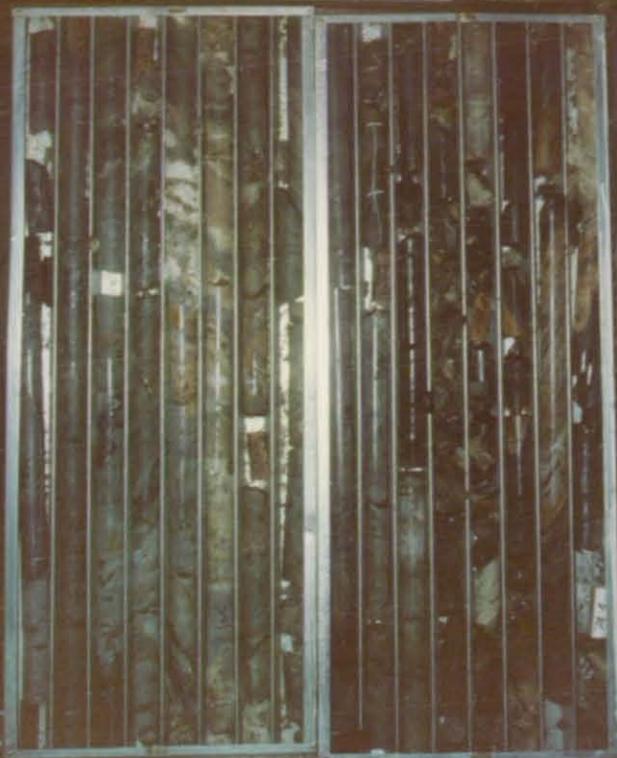


DDH BH 300/3

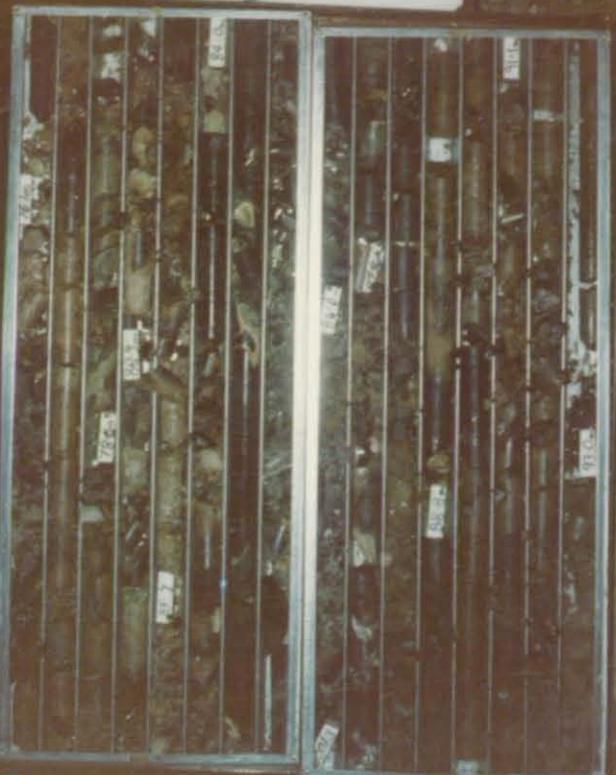
45.32 — 60.32 m.



DDH BH 300/3  
60.32 — 75.13 m.



DDH BH 300/3  
75.13 — 93.42 m.



DDH BH 300/3  
93.42 — 96.00 m.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 300/2

PLANNING

PROPOSER: J. Clark DEPTH: 120  
LOCATION: Q42 Drive  
PURPOSE OF HOLE: Ore blocking fault block  
CO-ORDS: 40375 E 10300 N  
INCLINATION:  $-78^{\circ}$   
BEARING: 090  $^{\circ}$  GRID  $^{\circ}$  MAG  
TARGET: E N

SURVEY

SURVEY CO-ORDS: E N  
SURVEYED BEARING:  $090^{\circ} 30'$  GRID  $^{\circ}$  MAG  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40377.9 E 10300.8 N  
R.L. OF COLLAR 951.8  
INCLINATION OF HOLE  $-77^{\circ}$   
PICKED UP BY: B. Lennon DATE: 7/3/79

SUMMARY

LOGGED BY: J. Clark  
RESULTS: 90 - 94m, 4m @ 1.18%  $WO_3$

DRILLING

DATE COMMENCED: 29/2/79 DATE TERMINATED: 4/4/79  
DRILLER/CONTRACTOR: K.I.S.  
CASING: SIZE:  
DEPTH:  
CORE: SIZE:  
DEPTH:  
WEDGE PLACED: DATE:  
EXTENSION:  
FINAL DEPTH: 132.7m  
REASON FOR TERMINATION: Passed through ore bearing sequence  
CONDITION OF HOLE ON COMPLETION:  
CASING:  
CEMENTED:  
BORE HOLE SURVEY:  
WATER:  
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.3	3.3	3.1	94
3.3 - 6.3	3.0	2.85	95
6.3 - 9.0	2.7	2.7	100
9.0 - 12.0	3.0	2.95	98
12.0 - 15.2	3.2	3.2	100
15.2 - 17.4	2.2	1.7	77
17.4 - 19.4	2.0	2.0	100
19.4 - 22.0	2.6	2.6	100
22.0 - 25.0	3.0	3.0	100
25.0 - 26.0	1.4	1.4	100
26.4 - 28.9	2.5	2.5	100
28.9 - 31.3	2.4	2.4	100
31.3 - 33.9	2.6	2.6	100
33.9 - 36.8	2.9	2.9	100
36.8 - 39.0	2.2	2.2	100
39.0 - 41.4	2.4	2.4	100
41.4 - 43.4	2.6	2.6	100
47.8 - 45.0	1.2	1.2	100
45.0 - 48.0	3.0	3.0	100
48.0 - 51.2	3.2	3.2	100
51.2 - 53.9	2.7	2.7	100
53.9 - 54.6	0.7	0.7	100
54.6 - 57.6	3.0	3.0	100
57.6 - 60.6	3.0	3.0	100
60.6 - 63.5	2.9	2.9	100
63.5 - 65.3	1.8	1.8	100
65.3 - 68.5	3.2	3.2	100
68.5 - 70.6	2.1	2.1	100
70.6 - 73.6	3.0	3.0	100
73.6 - 76.6	3.0	3.0	100
76.6 - 79.6	3.0	3.0	100
76.6 - 82.6	3.0	3.0	100
82.6 - 85.6	3.0	3.0	100
85.5 - 88.5	2.9	2.9	100
88.5 - 91.5	3.0	3.0	100
91.5 - 94.0	2.5	2.5	100
94.0 - 96.6	2.6	2.6	100
96.6 - 100.2	3.6	3.6	100
100.2 - 102.2	2.0	2.0	100
102.2 - 104.4	2.2	2.2	100
104.4 - 108.2	3.8	3.0	79
108.2 - 112.5	4.3	4.0	93
112.5 - 115.0	2.5	2.5	100
115.0 - 118.0	3.0	3.0	100
118.0 - 120.6	2.6	2.8	108
120.6 - 122.6	2.0	2.0	100
122.6 - 124.5	1.9	1.9	100
124.5 - 127.5	3.0	2.1	70
127.5 - 130.5	3.0	1.8	60
130.5 - 132.7	2.2	0.9	41

GEOLOGY - KING ISLAND - SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/2

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO <sub>3</sub>	Mo	
BH 9600	15	16	1.0	1.0	0.05	0.02	
01	16	17	"	"	0.02	0.01	
02	74	75	"	"	0.01	0.01	
03	75	76	"	"	0.44	0.02	
04	76	77	"	"	<0.01	<0.01	
05	77	78	"	"	<0.01	<0.01	
06	78	79	"	"	0.02	0.01	
07	79	80	"	"	<0.01	0.01	
08	80	81	"	"	<0.01	<0.01	
09	81	82	"	"	<0.01	<0.01	
10	82	83	"	"	0.01	0.01	
11	83	84	"	"	0.07	0.01	
12	84	85	"	"	0.47	0.02	
13	85	86	"	"	0.04	0.01	
14	86	87	"	"	0.17	<0.01	
15	87	88	"	"	0.06	0.03	
16	88	89	"	"	0.07	<0.01	
17	89	90	"	"	0.03	0.01	
18	90	91	"	"	0.59	0.04	
19	91	92	"	"	0.69	0.03	
20	92	93	"	"	1.54	0.05	
21	93	94	"	"	1.90	0.07	
22	94	95	"	"	0.22	0.01	
23	95	96	"	"	0.16	0.01	
24	96	97	"	"	0.21	0.01	
25	97	98	"	"	0.36	0.02	
26	98	99	"	"	<0.01	0.01	
27	99	100	"	"	0.04	0.01	

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

~~GEOLOGY~~ ~~KING ISLAND~~ ~~SCHEELITE~~

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 300/2

Survey method: Single shot  
Final depth: 132.7m  
Casing depth: 1.0m

Depth surveyed to: 130.5m  
Date surveyed: 4/4/79  
Surveyed by: L. Denby  
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
50	090	62°	12° 45'	-77.25°	49.25	0	11.5
130.5	088	60	12°	-78			
132.7					130.14	0.60	28.33

REMARKS:

GEOLOGY - KING ISLAND, SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/2

0.30 - 4.80m PYROXENE-BIOTITE HORNFELS

Interbedded and lensed light green pyroxene hornfels, brown biotite hornfels and minor quartz and calcite. The unit is gradational with that below.

Bedding ranges between  $30^{\circ}$  -  $54^{\circ}$  to core axis, but in places the unit is so disturbed there is no bedding.

Fractures/m =  $\begin{matrix} >20 & 0.3 - 1.0m \\ 5 & 1.0 - 4.8m \end{matrix}$   
Recovery = 100%

4.80 - 24.90 PYROXENE-CALCITE HORNFELS

This is varied unit and represents a lens in the sequence.

- 4.8 - 9.6m Mainly light green pyroxene hornfels, with lenses and beds of pink grossular, calcite and quartz. Minor biotite is also present. Towards 9.6m fine grained dark green pyroxene and amphibole are an alteration product next to the basic dyke. Bedding is mildly disturbed and in places obliterated, but where present averages  $45^{\circ}$  to core axis.
- 9.6 - 12.5m Black very fine grained basic dyke.
- 12.5 - 16.5m Fine grained green pyroxene hornfels grades into a disturbed pyroxene - calcite hornfels which contains minor grossular. Between 15.2 - 16.5 andradite grossular, pyroxene and marble are present scattered, fine grained sub-grade scheelite.
- 16.5 - 17.2 No core.
- 17.2 - 19.4 Aplite dyke. Medium grained slightly altered light green aplite dyke. This unit is very broken. (Av.  $>20$  fractures/m) and contains quartz feldspars-epidote pyrite and minor biotite. Red ironstaining and pressed or some fracture surfaces.
- 19.4 - 24.9 Pyroxene hornfels containing lenses and beds of grossular and calcite which minor biotite hornfels present towards the end of the unit. Where present bedding is about  $50^{\circ}$  to core axis.

Fractures/m = av. 5  
Recovery = 95%

24.90 - 47.20 BIOTITE HORNFELS

Brown fine grained biotite hornfels with minor grey actinolite hornfels and light green pyroxene hornfels. Bedding is not well defined but at 46.7m is  $50^{\circ}$  to core axis.

24.9 - 33.9 Average 4 fractures/metre  
33.9 - 36.3  $>20$  fractures/m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/2

36.8 - 47.2 Average 10 fractures/m. An aplite dyke is present between 34.7 - 35.2 in the zone of broken core. The core is most severely broken between 35.8 - 36.2 and there may have been minor recemented breccia in this interval.

Small aplite dykes are present between 40.5 - 50.0m.

Recovery = 100%

47.20 - 62.50

MARBLE

White to light grey fine-grained marble with minor pyroxene and scattered coarse crystals of grossular.

47.2 - 48.9 Pyroxene-grossular rock with minor calcite and amphibole. Trace scheelite is present with amphibole at 47.75m

54.3 - 54.7 Broken core, due to fracturing along soft calcite clay veins and swelling of vein material.

At 52.9m banding is 50° to core axis.

Fractures/m = 5  
Recovery = 100%

62.50 - 72.1

BIOTITE HORNFELS

Brown biotite hornfels with smaller amounts of interbedded green pyroxene hornfels and grey actinolite hornfels

Bedding in 46° to core axis.

65.2 - 65.4 Minor broken core.

Fractures/m = 8  
Recovery = 100%

72.10 - 93.90

PYROXENE - GARNET HORNFELS

Calcite fragments often rimmed by grossular, vary in size from 4cm to less than 1cm and are present in a matrix of pyroxene and grossular.

75.7 - 75.8 Scattered fine to medium grained scheelite in andradite rich section of core.

bph (p)

76.8 - 81.2 Podded biotite-pyroxene hornfels with rock fragments rimmed by pyroxene and minor grossular in a matrix of biotite hornfels. Only minor calcite fragments are present.

pgh

83.9 - 88.0 Scattered fine to medium grained scheelite is irregularly distributed in pyroxene-garnet hornfels. There are mild concentrations of scheelite in calcite/amphibole aggregates.

GEOLOGY, KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/2

90.2 - 93.9 Fine grained thickly disseminated scheelite in present in most of this section. Calcite fragments are typically only 1cm diameter and are often associated with amphibole.

Fractures/m = 4  
Recovery = 100%

93.90 - 109.60. BANDED FOOTWALL BEDS

Finely interbedded pyroxene biotite and calcite hornfels.

93.9 - 94.4 Broken core. ?Fault Zone. E-W fault.

94.4 - 98.0 Beds of andradite garnet contain fine grained disseminated scheelite. The largest bed is between 94.8 - 95.2m In the first metre bedding is very disturbed.

102.1 - 102.2 Broken core.

Bedding is  $70.75^{\circ}$  to core axis.

Fractures/m = 10  
Recovery = 98%

109.60 - 132.70 BIOTITE HORNFELS/PYROXENE HORNFELS

Finely interbedded brown biotite hornfels and green pyroxene hornfels and minor marble. The unit is very weathered and red ironstaining is common.

109.6 - 110.0 Clay and fine rock fragments.

122.3 - 122.5 Broken core associated with a weathered zone

117.1 - 117.3 Broken core.

124.3 - 132.7 Broken and weathered core with substantial core loss. Nearly half the core recovered in this section is yellowish brown clay.

Bedding is  $70^{\circ}$  to core axis.

Fractures/m = 12 in rock  
Recovery = 72%

EOH 132.7m

DDH BH 300/2

0.00 — 15.40 m.



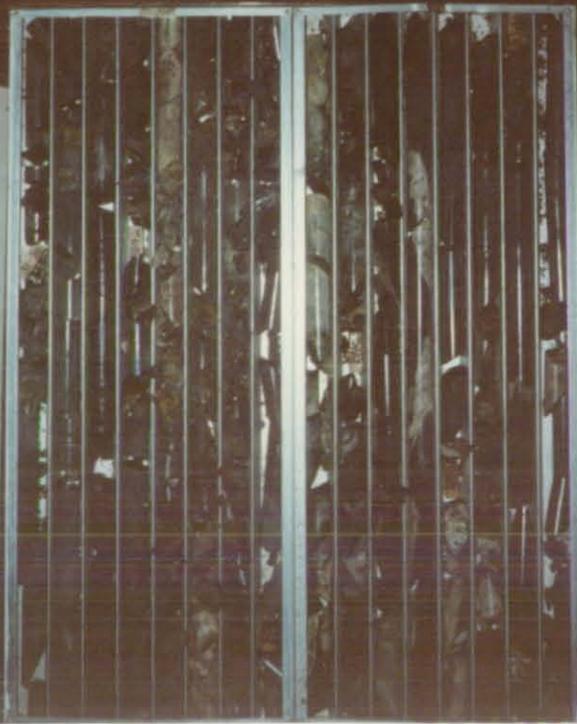
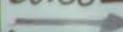
DDH BH 300/2

15.40 — 30.80 m.



DDH BH 300/2

30.80 — 44.55 m.



DDH BH 300/2

44.55 — 59.15 m.



DDH BH 300/2

59.15 — 73.88 m.

DDH BH 300/2

73.88 — 88.84 m.

DDH BH 300/2

88.84 — 103.60 m.

DDH BH 300/2

103.60 — 119.36 m.

DDH BH 300/2  
119.36 — 132.70 m.  
E.O.H.  
→



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 300/1

PLANNING PROPOSER: J. Clark DEPTH: 150m

LOCATION: Q42 Drive

PURPOSE OF HOLE: Ore Blocking Fault Block

PROPOSED CO-ORDS: 40375 E 10300 N

INCLINATION:  $-90^{\circ}$

BEARING: ° GRID ° MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N

SURVEYED BEARING: ° GRID ° MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40377.6 E 10300.7 N

R.L. OF COLLAR: 951.4

INCLINATION OF HOLE:  $-90^{\circ}$

PICKED UP BY: B. Lennon DATE: 2/2/79

SUMMARY LOGGED BY: J. M. Clark

RESULTS: 15-19m, 4m at 0.71% MO } was  
87-100m 13m at 0.76% MO }  
112-123m, 11m at 1.10% MO }

DRILLING DATE COMMENCED: 3/1/79 DATE TERMINATED: 29/2/79

DRILLER/CONTRACTOR: K.I.S.S.

CASING: SIZE: BQ  
DEPTH: 1.0m

CORE: SIZE: 46TT  
DEPTH: 138.5

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 138.5m

REASON FOR TERMINATION: Impenetrable clay zone.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 300/1

Surveyed method: Multishot Camera  
 Final depth: 138.5m  
 Casing depth: 1.0m

Depth surveyed to: 138.5m  
 Date surveyed: 282/2/79  
 Surveyed by: L. Denby  
 Checked by: J. Clark

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.		N	E
28	043	015	1°	-89	27.99	0.36	0.31
44	034	006	1°	-89	34.99	0.59	0.47
57	004	334	1°	-89	56.66	0.82	0.49
68	358.5	330.5	1° 15'	-88.75°	67.99	1.06	0.48
84	355	327	1° 45'	-88.25	83.98	1.55	0.44
93	356	328	1° 45'	-88.25	92.98	1.82	0.42
97	356	328	1° 45'	-88.25	96.98	1.94	0.41
102	355	327	1° 15'	-88.75	101.98	2.05	0.40
108	350	322	1° 45'	-88.25	107.98	2.23	0.37
120	346	318	1° 45'	-88.25	119.97	2.59	0.28
129	341	313	2°	-88	128.96	2.88	0.18
138.5	338	310	2° 15'	-87.75	138.45	3.22	0.04

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 300/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.8m	2.8	1.4	50
2.8 - 5.3	2.5	2.6	104
5.3 - 8.7	3.4	2.4	100
8.7 - 11.0	2.3	1.9	83
11.0 - 13.5	2.5	2.2	88
13.5 - 15.9	2.4	2.3	96
15.9 - 18.9	3.0	2.9	97
18.9 - 21.5	2.4	2.2	92
21.5 - 25.9	4.4	4.3	98
25.9 - 28.5	2.4	2.2	92
28.5 - 32.3	2.8	2.5	92
32.3 - 37.0	4.7	3.8	81
37.0 - 39.34	2.3	2.1	91
39.3 - 42.8	3.5	3.5	100
42.8 - 44.0	1.2	1.2	100
44.0 - 46.5	2.5	2.0	80
46.5 - 49.8	2.2	2.7	112
49.8 - 52.9	3.1	3.0	97
52.9 - 55.9	3.0	3.0	100
55.9 - 58.5	2.6	2.5	96
58.5 - 61.1	2.8	2.5	96
61.1 - 63.6	2.5	2.5	100
63.6 - 66.6	3.0	3.0	100
66.6 - 68.6	2.0	1.85	93
68.6 - 70.3	1.7	1.7	100
70.3 - 73.8	3.5	3.5	100
73.8 - 76.8	3.0	2.7	90
76.8 - 79.8	3.0	3.0	100
79.8 - 82.8	3.0	3.0	100
82.8 - 85.8	3.0	3.0	100
85.8 - 88.8	3.0	3.0	100
88.8 - 91.8	3.0	3.0	100
91.8 - 94.8	3.0	3.0	100
94.8 - 97.8	3.0	3.0	100
97.8 - 100.8	3.0	3.0	100
100.8 - 103.8	3.0	2.7	90
103.8 - 104.8	1.0	0	0
104.8 - 106.3	1.5	1.4	93
106.3 - 108.8	2.5	2.4	96
108.8 - 111.1	2.3	1.3	57
111.1 - 114.5	3.4	3.4	100
114.5 - 117.1	2.6	2.6	100
117.1 - 120.1	3.0	3.0	100
120.1 - 123.1	3.0	3.0	100
123.1 - 126.0	2.9	2.9	100
126.0 - 129.0	3.0	3.0	100
129.0 - 135.6	6.6	6.4	97
135.6 - 138.5	2.9	2.9	100
EOH 138.5m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/1

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 6830	12	13	1.0	1.0	0.40	0.02		
31	13	14	"	"	0.01	0.01		
32	14	15	"	"	0.04	0.01		
33	15	16	"	"	0.43	0.01		
34	16	17	"	"	0.22	0.04		
35	17	18	"	"	1.82	0.09		
36	18	19	"	"	0.37	0.01		
37	19	20	"	"	0.01	0.01		
38	20	21	"	"	0.01	0.01		
39	47	48	"	"	0.01	0.02		
40	48	49	"	"	0.01	0.01		
41	49	50	"	"	0.34	0.01		
42	50	51	"	"	0.01	0.01		
43	51	52	"	"	0.03	0.01		
44	52	53	"	"	0.01	0.01		
45	53	54	"	"	0.01	0.01		
46	54	55	"	"	0.01	0.01		
47	55	56	"	"	0.14	0.01		
48	56	57	"	"	0.01	0.01		
49	82	83	"	"	0.02	0.01		
50	83	84	"	"	0.01	0.01		
63	84	85	"	"	0.02	0.01		
64	85	86	"	"	0.01	0.01		
65	86	87	"	"	0.01	0.01		
66	87	88	"	"	0.36	0.01		
67	88	89	"	"	0.89	0.02		
68	89	90	"	"	0.10	0.01		
69	90	91	"	"	0.36	0.01		
70	91	92	"	"	0.48	0.01		
71	92	93	"	"	0.11	0.01		
72	93	94	"	"	2.58	0.06		
73	94	95	"	"	0.72	0.01		
74	95	96	"	"	1.13	0.02		
75	96	97	"	"	0.66	0.01		
76	97	98	"	"	1.02	0.02		
77	98	99	"	"	0.86	0.03		
78	99	100	"	"	0.58	0.01		
79	100	101	"	"	0.07	0.01		
80	101	102	"	"	0.05	0.01		
81	102	103	"	"	0.44	0.02		
82	103	104	"	"	0.09	0.01		
87	112	113	"	"	1.10	0.03		
88	113	114	"	"	0.62	0.02		
89	114	115	"	"	0.44	0.01		
90	115	116	"	"	0.19	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 300/1

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 6891	116	117	1.0	1.0	0.42	0.01		
92	117	118	"	"	0.09	0.01		
93	118	119	"	"	2.78	0.08		
94	119	120	"	"	1.99	0.05		
95	120	121	"	"	2.87	0.08		
96	121	122	"	"	1.06	0.02		
97	122	123	"	"	0.55	0.02		
98	123	124	"	"	0.22	0.01		
99	124	125	"	"	0.01	0.01		
83	134	135	"	"				
84	135	136	"	"	0.46	0.03		
85	136	137	"	"	0.16	0.01		
86	137	138	"	"	0.32	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/1

0.0 - 14.50m PYROXENE HORNFELS/BIOTITE HORNFELS

Consists of light green disturbed pyroxene hornfels and dark purplish brown biotite hornfels.

- 0.0 - 9.9m Mainly pyroxene hornfels. The beginning (0.2m) of this unit is very broken. Bedding is present in this interval and averages 40° to core axis where not disturbed. It is emphasised by small discontinuous beds of cloudy white feldspars and very light green pyroxene.
- 5.1 - 5.3 Light green, epidote-rich aplite dyke.
- 6.8 - 7.0 Minor calcite and grossular in a disturbed section of core.
- 9.9 - 14.5 Dark brown biotite does not show bedding, but light green spots are present at 13.4 - 13.50m.

Fractures/m = 10

14.50 - 19.0 GARNET - PYROXENE HORNFELS

Fine grained pink grossular and light green pyroxene have small calcite lenses throughout, and some short lengths of core are very calcite rich.

Fine grained disseminated scheelite is irregularly present, the longer intervals being 15.5 - 15.7m and 17.3 - 18.0m.

8.8 - 19.0m Broken core.

Fractures/m = 5  
Recovery = 100%

19.00 - 20.50 MARBLE

This is a very impure marble and has abundant pyroxene with lesser amounts of grossular. Bedding has been very disturbed and the unit appears to be fragmental probably because of proximity to the aplite dyke.

At 19.5m there is a coarse grain of scheelite.

Fractures/m = 7

20.50 - 22.50 APLITE

Fine grained, very broken aplite which has a slightly pink and blocky red appearance due to weathering. Epidote is also present.

Fractures/m = 20  
Recovery = 90%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/1

22.50 - 38.50 MARBLE

This is a very variable lens unit consisting of Marble, pyroxene-calcite hornfels and pyroxene hornfels.

- 22.5 - 23.1m Very weathered and disturbed marble has a yellowish brown colour.
- 23.1 - 24.2 Fine grained grossular, calcite and pyroxene
- 24.2 - 25.9 Disturbed marble with many small ironstained fractures throughout.
- 25.9 - 30.0 Biotite pyroxene hornfels with short zones of moderately broken core. Some fractures have thin talc coatings.
- 30.0 - 38.5 Calcite pyroxene hornfels with small areas rich in talc. Core has been moderately disturbed and there is no indication of bedding. Core is broken and between 35.0 - 36.7 red ironstaining is present along and next to fractures.

Scheelite is not present.

Fractures/m = 15

38.50 - 48.10 BIOTITE HORNFELS

Dark purplish brown biotite hornfels with minor pyroxene at either end of the unit.

40.3 - 41.4m Coarse grained calcite - Pyroxene hornfels

At 46.5m bedding is  $48^{\circ}$  to core axis.

Fractures/m = 7  
Recovery = 100%

48.10 - 52.40 GARNET - PYROXENE HORNFELS

Indistinctly bedding pyroxene and grossular garnet with abundant calcite and irregularly distributed fine grained scheelite. Small randomly oriented calcite veins are common.

51.1 - 57.5 Longest interval of disseminated scheelite.

At 50m bedding is  $33^{\circ}$  to core axis.

Fractures/m = 4  
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/1

52.40 - 55.90 MARBLE

Light grey marble containing minor grossular. Bedding is 30° to core axis.

55.2 - 55.8 Garnet, pyroxene hornfels with grossular minor andradite pyroxene and calcite. Fine grained scheelite is moderately disseminated between 55.3 - 55.6m

Fractures/m = 4  
Recovery = 100%

55.90 - 82.80 BIOTITE/PYROXENE HORNFELS

Dark purplish brown biotite hornfels with interbedded and lensed green pyroxene hornfels. The beginning of the unit (55.9 - 60.2) contains minor broken core.

62.8 - 63.6m Aplite dyke  
68.5 - Minor biotite core.  
71.2 - 82.80 Podded biotite-pyroxene hornfels with contains abundant quartz fragments and several calcite fragments. Pyroxene and grossular are present in irregularly shaped areas.  
At 70.9m bedding is 46° to core axis.  
80.6 - 80.7 Yellowish brown clays are present within core.

Fractures/m = 5  
Recovery = 100%

82.80 - 93.00 PYROXENE-GARNET HORNFELS

Fragments of marble rimmed by grossular and amphibole/calcite are set in a matrix of pyroxene grossular and calcite, with minor biotite and andradite garnet becoming more common towards the end of the unit. The lower boundary of this unit is gradational

Sparsely scattered fine to coarse grained scheelite is present between 87.6 - 93.0m and there are several lengths where the scheelite is thickly disseminated.

eg 87.8 - 88.05m, 88.4 - 88.6 Minor broken core is present at 86.7m.

Fractures/m = 3  
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/1

93.00 - 99.90 GARNET HORNFELS

Fine grained andradite garnet, pyroxene amphibole and blebs of calcite are present. Fine grained scheelite is thickly disseminated through most of this unit with only short lengths (10cm) containing sparsely disseminated scheelite (between 95.0 - 96.0m)

Fractures/m = 5  
Recovery = 100%

99.90 - 103.80 MINERALISED BANDED FOOTWALL BEDS

Only short sections of this unit show bedding, with the remainder being very confused, or indistinctly podded. Most of the beds are composed of pyroxene, grossular or andradite.

Scheelite is present in fine beds and in some lengths of disturbed bedding.

eg 102.0 - 102.1m, 102.2 - 102.5m, 103.0 - 103.1m,  
103.3 - 103.4m.  
101.5 - 101.8m No core recovered in clay zone.

At 100.3m bedding is 35° to core axis.

Fractures/m = 6

103.80 - 112.00 WEATHERED BANDED FOOTWALL BEDS

Very broken and weathered banded footwall beds and clay. One metre of core was lost between 103.8 - 104.8m. Most of the beds are composed to biotite or marble with minor grossular

Scheelite is not present.

Fractures/m = 20  
Recovery = 75%

112.00 - 123.10 MINERALISED BANDED FOOTWALL BEDS

Predominately interbedded pyroxene and garnet hornfels with some small grossular rich beds. Bedding is quite disturbed:

At 112.5 bedding is 54° to core axis.  
115.5 47°  
118.2 24°  
118.5 subparallel  
122.0 70°

Scheelite is present as short lengths of thickly disseminated crystals and as scattered crystals. The longest length of high grade scheelite is 119.8 - 122.0m, with shorter lengths being 118.6 - 119.4m, 116.2 - 116.4m, 112.5 - 112.9m, 122.7 - 123.1m.

Fractures/m = 6  
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 300/1

123.1 - 138.50 BANDED FOOTWALL BEDS

Finely interbedded biotite, pyroxene calcite and grossular. Bedding is consistently 70 - 80° to core axis.

131.8 - 133.6 Broken core with lengths of brown and yellowish brown clay

Fine to medium grained moderately disseminated scheelite is present at 135.7 - 136.0m, 136.6 136.8m and is shorter lengths around these.

The end of the hole consists of mildly broken slightly weathered banded footwall beds containing abundant garnet. The hole could not penetrate a clay zone and was stopped.

Fractures/m = 11  
Recovery = 100%

EOH 138.50m



DDH BH 300/1

00.00 - 16.55 m.



DDH BH 300/1

16.55 - 32.15 m.



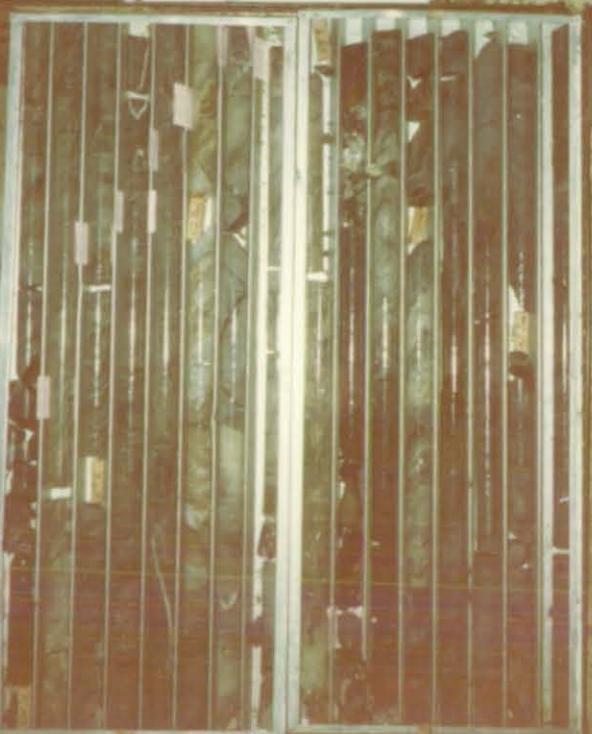
DDH BH 300/1

32.15 - 47.35 m.

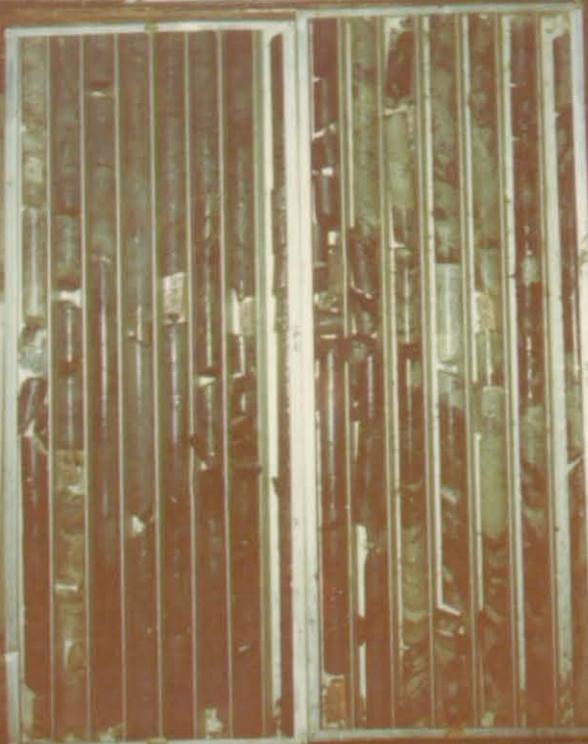


DDH BH 300/1

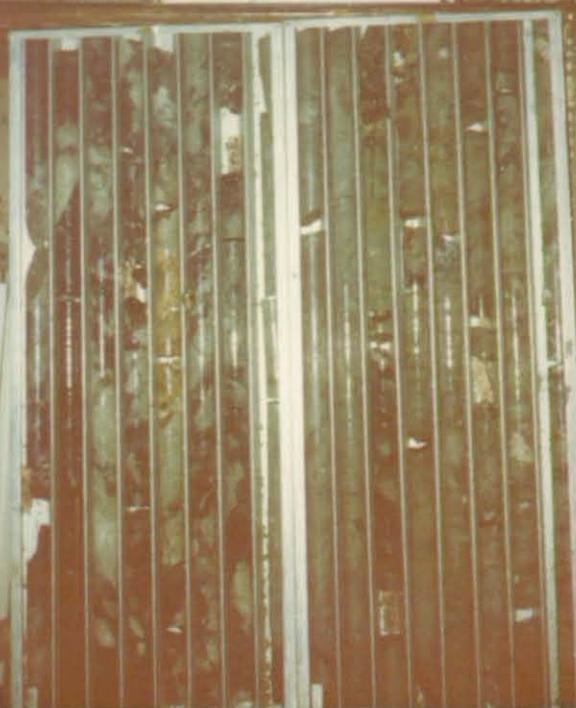
47.35 - 62.43 m.



DDH BH 300/1  
62.43 - 76.08 m.



DDH BH 300/1  
76.08 - 91.20 m.



DDH BH 300/1  
91.20 - 107.16 m.



DDH BH 300/1  
106.30 - 122.27 m.



DDH BH 300/1  
122.37 — 137.00 m.



DDH BH 300/1  
137.00 — 138.50 m.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 250/2

PLANNING PROPOSER: M, Rogers DEPTH: 400 m  
LOCATION: Bold Head surface  
PURPOSE OF HOLE: To test 'B' Lens Fault block on 10250 N  
PROPOSED CO-ORDS: 40 400.0 E 10250.0 N  
INCLINATION: -90°  
BEARING: ° GRID ° MAG  
TARGET: 10400.0 E 10250.0 N  
DEPTH: 850 m R.L.  
CHECKED BY: S. G. Brown DATE: 16/10/79

SURVEY SURVEY CO-ORDS: 40399.97E 10249.81 N  
SURVEYED BEARING: ° GRID ° MAG  
SURVEYED IN BY: B. Lennon DATE:  
ACTUAL CO-ORDS: 403 99.97 E 10249.81 N  
R.L. OF COLLAR: 1120.14 15G 220359.1 E 566886.5 N  
INCLINATION OF HOLE: -90°  
PICKED UP BY: B. Lennon DATE: 23/11/79

SUMMARY LOGGED BY: R. E. Sandell Davies  
RESULTS: 278-283 m, 5 m @ 0.42% WO<sub>3</sub>

DRILLING DATE COMMENCED: 16/11/79 DATE TERMINATED: 14/3/80  
DRILLER/CONTRACTOR: A.D.D./S. Batchelor  
CASING: SIZE: HQ NQ  
DEPTH: 30 m 239  
CORE: SIZE: HQ NQ BQ  
DEPTH: 30 m 239 256.7  
WEDGE PLACED: DEPTH: PROPOSER:  
EXTENSION:  
FINAL DEPTH: 356.7 m  
REASON FOR TERMINATION: Hole abandoned due to caving from uncased faults.  
CONDITION OF HOLE ON COMPLETION:  
CASING:  
CEMENTED:  
BORE HOLE SURVEY: !Singleshot every 30 m  
WATER:  
COMMENTS ON DRILLING CONDITIONS: Bad between 90 m and 300 m.

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 250/2

Surveyed method: Singleshot  
 Final depth: 356.7 m  
 Casing depth: 239 m

Depth surveyed to: 356 m  
 Date surveyed:  
 Surveyed by: R. Drake  
 Checked by:

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.			
39	269 <sup>o</sup>	241 <sup>o</sup>	0 <sup>o</sup> 15'	-89 <sup>o</sup> 45'			
73.5	237 <sup>o</sup>	209 <sup>o</sup>	1 <sup>o</sup>	-89 <sup>o</sup>			
107	286 <sup>o</sup>	258 <sup>o</sup>	1 <sup>o</sup>	-89 <sup>o</sup>			
158	028 <sup>o</sup>	0 <sup>o</sup>	0 <sup>o</sup> 15'	-89 <sup>o</sup> 45'			
186	128 <sup>o</sup>	100 <sup>o</sup>	0 <sup>o</sup> 15'	-89 <sup>o</sup> 45'			
226	073 <sup>o</sup>	045 <sup>o</sup>	0 <sup>o</sup> 15'	-89 <sup>o</sup> 45'			
274	111 <sup>o</sup>	083 <sup>o</sup>	1 <sup>o</sup> 20'	-88 <sup>o</sup> 40'			
320	052 <sup>o</sup>	024 <sup>o</sup>	1 <sup>o</sup> 45'	-88 <sup>o</sup> 15'			
356	036 <sup>o</sup>	008 <sup>o</sup>	2 <sup>o</sup>	-88 <sup>o</sup>			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 250/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
5.4 - 6.6 m	1.2	1.1	92
6.6 - 7.2	0.6	0.6	83
7.2 - 8.0	0.8	0.7	88
8.0 - 10.4	2.4	2.0	83
10.4 - 11.2	0.8	0.7	88
11.2 - 11.9	0.7	0.6	86
11.9 - 14.0	2.1	1.9	90
14.0 - 15.2	1.2	1.1	92
15.2 - 16.7	1.5	1.4	93
16.7 - 17.7	1.0	0.9	90
17.7 - 18.1	0.4	0.3	75
18.1 - 20.6	2.5	2.4	96
20.6 - 22.2	1.6	1.5	94
22.2 - 25.3	3.1	3.1	100
25.3 - 26.8	1.5	1.5	100
26.8 - 28.0	1.2	1.2	100
28.0 - 29.6	1.6	1.6	100
29.6 - 30.0	0.4	0.4	100
30.0 - 32.0	2.0	1.9	95
32.0 - 34.0	2.0	2.0	100
34.0 - 35.0	1.0	1.0	100
35.0 - 38.0	3.0	3.0	100
38.0 - 39.8	1.8	1.8	100
39.8 - 41.0	1.2	1.2	100
41.0 - 43.0	2.0	2.0	100
43.0 - 45.2	2.2	2.2	100
45.2 - 46.4	1.2	1.1	92
46.4 - 49.4	3.0	3.0	100
49.4 - 52.4	3.0	3.0	100
52.4 - 54.2	1.8	1.7	94
54.2 - 55.4	1.2	1.0	83
55.4 - 58.4	3.0	3.0	100
58.4 - 61.0	2.6	2.6	100
61.0 - 62.0	1.0	1.0	100
62.0 - 63.7	1.7	1.7	100
63.7 - 66.7	3.0	3.0	100
66.7 - 68.0	1.3	1.3	100
68.0 - 71.0	3.0	3.0	100
71.0 - 73.5	2.5	2.5	100
73.5 - 76.6	3.1	3.1	100
76.6 - 79.7	3.1	3.1	100
79.7 - 82.0	2.3	2.3	100
82.0 - 85.0	3.0	3.0	100
85.0 - 88.0	3.0	3.0	100
88.0 - 89.3	1.3	1.3	100
89.3 - 90.1	0.8	0.7	88
90.1 - 91.1	1.0	1.0	100
91.1 - 93.0	1.9	1.9	100
93.0 - 94.1	1.1	1.1	100
94.1 - 94.6	0.5	0.3	60
94.6 - 95.0	0.4	0.4	100
95.0 - 96.4	1.4	1.3	93
96.4 - 97.2	0.8	0.7	88

## GEOLOGY - KING ISLAND SCHEELITE

## CORE RECOVERY

D.D.H. No. BH 250/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
97.2 - 98.7	1.5	1.1	73
98.7 - 99.0	0.9	0.8	89
99.0 - 99.9	0.9	0.8	89
99.9 - 101.1	1.2	1.1	92
101.1 - 102.6	1.5	1.4	93
102.6 - 104.8	2.2	2.2	100
104.8 - 105.8	1.0	1.0	100
105.8 - 107.1	1.3	1.2	92
107.1 - 108.6	1.5	0.8	53
108.6 - 109.2	0.6	0.2	33
109.2 - 110.1	0.9	0.7	78
110.1 - 112.1	2.0	2.0	100
112.1 - 115.0	2.9	2.9	100
115.0 - 116.1	1.1	1.1	100
116.1 - 117.4	1.3	1.3	100
117.4 - 118.3	0.9	0.8	89
118.3 - 120.0	1.7	1.7	100
120.0 - 121.9	1.9	1.9	100
121.9 - 123.0	1.1	1.1	100
123.0 - 124.0	1.0	1.0	100
124.0 - 125.5	1.5	1.5	100
125.5 - 127.6	2.1	2.1	100
127.6 - 128.1	0.5	0.4	80
128.1 - 129.2	0.9	0.9	100
129.2 - 131.0	1.8	1.8	100
131.0 - 132.2	1.2	1.0	83
132.2 - 133.1	0.9	0.7	78
133.1 - 135.2	2.1	1.0	48
135.2 - 136.2	1.0	0.9	90
136.2 - 137.0	0.8	0.4	50
137.0 - 138.7	1.7	1.6	94
138.7 - 140.1	1.4	1.4	100
140.1 - 141.4	1.3	1.2	92
141.4 - 144.5	3.1	2.5	82
144.5 - 146.1	1.6	1.6	100
146.1 - 148.4	2.3	2.3	100
148.4 - 150.5	2.1	2.1	100
150.5 - 152.1	1.4	1.4	100
152.1 - 154.2	2.1	2.1	100
154.2 - 156.6	2.4	2.4	100
156.6 - 158.0	1.4	1.4	100
158.0 - 159.7	1.7	1.7	100
159.7 - 160.9	1.2	1.2	100
160.9 - 164.7	3.8	3.8	100
164.7 - 165.1	0.4	0.2	50
165.1 - 166.3	1.2	1.2	100
166.3 - 168.6	2.3	2.2	90
168.6 - 169.8	1.2	1.2	100
169.8 - 171.5	1.7	1.7	100
171.5 - 173.3	1.8	1.8	100
173.3 - 174.4	1.1	1.1	100
174.4 - 175.2	0.8	0.8	100
175.2 - 176.0	0.8	0.7	88

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. RH 250/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
176.0 - 177.6	1.6	1.6	100
177.6 - 178.1	0.5	0.5	100
178.1 - 180.0	1.9	1.9	100
180.0 - 181.2	1.2	1.2	100
181.2 - 182.0	0.8	0.8	100
182.0 - 183.2	1.2	1.0	83
183.2 - 185.0	1.8	1.8	100
185.0 - 186.0	1.0	0.9	90
186.0 - 187.3	1.3	1.3	100
187.3 - 188.2	0.9	0.9	100
188.2 - 189.4	1.2	1.0	83
189.4 - 191.1	0.7	0.7	100
191.1 - 193.0	1.9	1.7	89
193.0 - 194.0	1.0	0.9	90
194.0 - 195.0	1.0	1.0	100
195.0 - 196.4	1.4	1.3	93
196.4 - 198.1	1.7	1.5	88
198.1 - 200.1	2.0	1.8	90
200.1 - 202.7	2.6	2.6	100
202.7 - 203.8	1.1	1.1	100
203.8 - 205.1	1.3	1.3	100
205.1 - 207.0	1.9	1.8	95
207.0 - 208.9	1.9	1.8	95
208.9 - 210.2	1.3	1.3	100
210.2 - 213.2	3.0	2.5	83
213.2 - 216.2	3.0	3.0	100
216.2 - 218.1	1.9	1.9	100
218.1 - 221.0	3.0	3.0	100
221.0 - 223.8	2.8	2.8	100
223.8 - 226.1	2.3	2.2	96
226.1 - 229.1	3.0	2.9	97
229.1 - 233.1	4.0	3.9	98
233.1 - 235.0	1.9	1.8	95
235.0 - 236.8	1.8	1.8	100
236.8 - 238.0	1.2	1.2	100
238.0 - 239.0	1.0	0.8	80
239.0 - 240.6	1.6	1.4	88
240.6 - 242.3	1.7	1.5	88
242.3 - 243.5	1.2	1.0	83
243.5 - 244.8	1.3	1.2	92
244.8 - 246.3	1.5	1.2	80
246.3 - 250.0	3.7	2.0	54
350.0 - 251.0	1.0	1.0	100
251.0 - 252.0	1.0	0.9	90
252.0 - 253.8	1.8	1.7	94
253.8 - 356.1	2.3	2.3	100
256.1 - 257.0	0.9	0.9	100
257.0 - 260.0	3.0	3.0	100
260.0 - 263.0	3.0	3.0	100
263.0 - 266.0	3.0	2.7	90
266.0 - 268.0	2.0	1.8	90
268.0 - 269.0	1.0	0.9	90
269.0 - 270.3	1.3	1.2	92

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 250/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
270.3 - 271.2	0.9	0.9	100
271.2 - 273.1	1.9	1.7	89
273.1 - 274.6	1.5	0.9	60
274.6 - 277.6	3.0	2.9	97
277.6 - 279.8	2.2	2.0	91
279.8 - 281.0	1.2	0.6	50
281.0 - 282.0	1.0	0.8	80
282.0 - 285.0	3.0	2.9	67
285.0 - 286.0	1.0	0.9	90
286.0 - 287.0	1.0	0.9	90
287.0 - 287.3	0.3	0.2	67
287.3 - 288.6	0.9	0.8	89
288.6 - 290.0	1.4	1.2	80
290.0 - 291.5	1.5	0.7	47
291.5 - 292.8	1.3	0.8	62
292.8 - 293.3	0.5	0.2	40
293.3 - 293.6	0.3	0.1	33
293.6 - 294.3	0.7	0.4	57
294.3 - 294.7	0.4	0.3	75
294.7 - 296.0	1.3	1.0	77
296.0 - 296.5	0.5	0.2	40
296.5 - 297.4	0.9	0.6	67
297.4 - 298.2	0.8	0.2	25
298.2 - 299.0	0.8	0.7	88
299.0 - 299.5	0.5	0.3	60
299.5 - 302.0	2.5	2.5	100
302.0 - 205.0	3.0	3.0	100
305.0 - 308.0	3.0	2.9	97
308.0 - 311.0	3.0	3.0	100
311.0 - 311.7	0.7	0.6	86
311.7 - 314.0	2.3	2.3	100
314.0 - 317.0	3.0	3.0	100
317.0 - 320.0	3.0	2.2	73
320.0 - 322.2	2.2	2.2	100
322.2 - 325.2	3.0	3.0	100
325.2 - 326.2	1.0	1.0	100
326.2 - 329.0	2.8	2.8	100
329.0 - 311.5	2.5	2.5	100
331.5 - 332.0	0.5	0.5	100
332.0 - 333.3	1.3	1.3	100
333.3 - 334.1	0.8	0.8	100
334.1 - 344.4	0.3	0.3	100
334.4 - 336.5	2.1	2.1	100
336.5 - 338.2	1.7	1.7	100
338.2 - 340.0	1.8	1.6	89
340.0 - 343.0	3.0	3.0	100
343.0 - 346.0	3.0	3.0	100
346.0 - 349.0	3.0	3.0	100
349.0 - 352.0	3.0	3.0	100
352.0 - 355.0	3.0	3.0	100
355.0 - 356.7	1.6	1.6	100

FOH 356.7 m

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 250/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 7294	119	120	1.0	1.0	0.01	0.03		
95	120	121	"	"	0.01	0.04		
96	121	122	"	"	<0.01	0.02		
97	122	123	"	"	0.01	0.04		
98	123	124	"	"	<0.01	0.05		
99	124	125	"	"	0.01	0.03		
7300	125	126	"	"	0.01	0.03		
01	126	127	"	"	0.01	0.04		
02	127	128	"	"	<0.01	0.04		
03	128	129	"	"	<0.01	0.02		
04	129	130	"	"	<0.01	0.03		
05	130	121	"	"	<0.01	0.02		
06	131	132	"	"	<0.01	0.03		
07	132	133	"	"	<0.01	0.03		
08	133	134	"	"	<0.01	0.02		
09	134	135	"	"	<0.01	0.03		
10	135	136	"	"	0.01	0.04		
11	136	137	"	"	0.01	0.03		
12	137	138	"	"	0.01	0.02		
13	138	139	"	"	0.01	0.05		
14	139	140	"	"	<0.01	0.05		
15	140	141	"	"	0.01	0.03		
16	141	142	"	"	<0.01	0.06		
17	142	143	"	"	0.01	0.02		
18	143	144	"	"	<0.01	0.02		
19	144	145	"	"	<0.01	0.03		
20	145	146	"	"	0.01	0.04		
21	146	147	"	"	<0.01	0.02		
22	147	148	"	"	<0.01	0.01		
23	206	207	"	"	0.01	0.02		
24	207	208	"	"	0.27	<0.01		
25	208	209	"	"	0.02	0.01		
26	273	274	"	"	<0.01	1.02		
7501	274	275	"	"	0.01	0.01		
02	275	276	"	"	<0.01	0.01		
03	276	277	"	"	0.12	0.01		
04	277	278	"	"	0.17	0.01		
05	278	279	"	"	0.33	0.01		
06	279	280	"	"	0.35	0.01		
07	280	281	"	"	0.43	0.01		
29	281	282	"	"	0.63	<0.01		
30	282	283	"	"	0.34	<0.01		
31	283	284	"	"	0.22	0.01		
32	284	285	"	"	0.06	0.01		
33	285	286	"	"	0.06	0.01		
34	286	287	"	"	0.03	0.01		
35	287	288	"	"	0.04	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 250/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO <sub>3</sub>	Mo		
BH 7393	288	289	1.0	1.0	0.20	<0.01		
94	289	290	"	"	0.12	<0.01		
95	290	291	"	"	<0.01	0.01		
96	309	310	"	"	<0.01	0.01		
97	310	311	"	"	<0.01	<0.01		
98	338	339	"	"	0.07	0.01		
99	339	340	"	"	0.06	<0.01		
4700	340	341	"	"	0.08	<0.01		
01	341	342	"	"	0.01	0.01		
02	342	343	"	"	0.01	0.01		
03	343	344	"	"	0.01	0.01		
04	344	345	"	"	<0.01	0.02		
05	345	346	"	"	<0.01	<0.01		
06	346	347	"	"	0.02	0.01		
07	347	348	"	"	0.07	0.01		
08	248	249	"	"	0.14	<0.01		
09	349	350	"	"	0.02	0.02		
10	350	351	"	"	0.01	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

5.4 - 24.68 m UPPER VOLCANICS

Core very weathered with much clay and loose rubble. The first 16 m all consist of core less than 15 m long. Lower down the core is pale to medium grey in colour and fine grained. Some metamorphic spotting is developed.

24.68 - 39.4 UPPER VOLCANICS

Fine grained steel grey homogeneous sequence. Metamorphic spotting commonly developed. Freshly broken surface skarn faint traces of green, chloritic alteration minerals.

39.4 - 69.0 UPPER VOLCANICS

Fine grained steel grey coloured volcanics. A few small (1 mm) flecks of copper ore present in a shear zone at 52.45 m. In places the core is disturbed, appearing as a rehealed breccia. This occurs @ 50 m, 55.9 m, and 59.1 m.

From 54 - 55.3 m the core is very well jointed and the majority of fragments are < 5 cm.

69.0 - 109.08 UPPER VOLCANICS

Down to about 88 m the core is homogeneous and competent, consisting of long sections of core. Steel grey fine grained volcanics with metamorphic. Spotting commonly developed.

From 72 m there is 15 cm of brecciated core.

Below 88 m the core becomes very fractured and broken. Slickensides are present on most fragments.

There is some development of clay minerals.

109.08 - 117.7 VOLCANICS

This section of core is extremely brecciated, except for the gap between 112.2 - 115 m. Most of the core is rubbly, has slickensides and in places is rehealed.

The lithology is still volcanics, grey - green in colour and often showing metamorphic spotting.

117.7 - 118.9 PURE QUARTZITE

This is a creamy white rock, very hard and has a sugary texture. It is highly siliceous.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

118.9 - 131.0 m

BIOTITE/PYROXENE HORNFELS

This unit consists of interbedded biotite hornfels and pyroxene hornfels.

The contacts are generally disturbed and convoluted. Beds are generally 50 cm thick small specks of scheelite are present @ 119 m, 125.2 m, and 127.3 m. The latter piece contained many grains over 2 cm.

131.0 - 147.4

BIOTITE/PYROXENE HORNFELS

Lithology same as last unit but scheelite flecks slightly more common. Scattered specks of scheelite present through to base of unit. Core brecciated from 132 - 137 m, rubby and with slickenslides.

40 cm of green fresh quartzite from 143.6 m. Core very broken from 144 - 145 m, with much green ? chloritic material.

Nature of bottom contact cannot be clearly identified, it appears to be gradational, but contact could not be found.

147.4 - 160.0

VOLCANICS

Typical, steel grey hard, volcanics, often with iron stained fractures.

160.0 - 184.7

VOLCANICS

Steel grey, fine grained volcanics, often fractured.

164.7 - 184.5

BIOTITE HORNFELS

This section is mostly badly broken and fractured. Although not markedly different from the overlying volcanics, it is distinguished from them by its finer grain size, the presence of sulphides, and fewer rehealed fractures.

A small zone (10 cm recovered, 40 m in length) of gravel size fragments represents the contact of the two units.

Slickensides are extensively developed @ 165.6 - 166.3, and 179 - 182. In addition the core is extensively broken @ 172 - 174.4 m and 176 - 178 m.

184.5 - 199.2

BIOTITE HORNFELS

The rock is black, fine grained, homogeneous biotite hornfels.

Virtually all of this section of core is extensively broken and fractured. Slickensides and clay coatings are prominent.

The mean size of fragment is about 5 cm.

Only from 189.5 - 193.5 is core recovered in lengths 20 cm.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

199.2 - 203.7 m

ALTERED APLITE

This rock is an orange/rusty red to creamy green colour and has a saccharoidal texture. It is evidently a recrystallised aplite.

203.7 - 207.0

FRACTURED BIOTITE HORNFELS

Extremely brecciated one deformed rock, many shear zones present with orange red colouring. Core is mostly rubble from 205 - 207 m.

207.0 - 221.0

VOLCANICS

Weak mineralisation is present from 207 - 207.8, it is not ore grade. This section although competent shows extensive shearing and rehealed fracturing.

To 214 m the core is extensively broken and mostly recovered as rubble, clays are commonly present on broken surfaces.

The remainder of the core is very competent with very few breaks. However, it does show evidence of previous shearing and which is now rehealed. The shearing has created a fabric through the whole rock of about 35° to LCA.

This fabric has destroyed the original rock structure.

221.0 - 234.8

VOLCANICS

The core is very disturbed with many rehealed fractures, which are generally iron stained. From 223.7 - 225.3 the core is broken and fractured. Clay is present, with slickensides,

From 227.8 - 230.4 the core shows evidence of shearing and in places it is well broken with slickensides on mosy pieces.

From 232.7 - 234.8 the core becomes increasingly broken, The first 1 m is greatly sheared and partly broken and the last metre consists almost entirely of rubble 2 cm.

234.8 - 249.0

BIOTITE HORNFELS

Black fine grained rock with a number of rehealed fractures, marked by oxidation stains.

Extensive broken core is present from:

238.3 - 243.7 - mostly rubble. Some slickensides and clay,

246.0 - 249.0 - mostly rubble <5 cm.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

249.0 - 251.0 m

BEDDED BIOTITE HORNFELS

This core is leached and some clay is present in between fragments. Most pieces have slickensides on end faces.

The rock is well and thinly bedded (0.5 - 2 cm beds) and consists mostly of weathered and leached biotite hornfels, with minor pyroxene hornfels.

Bedding is  $40^{\circ}$  to LCA

251.0 - 256.68

BEDDED BIOTITE/CALCITE HORNFELS

A continuation of the previous unit, but with marble horizons which become more common down the core. The core is very leached and commonly broken and fractured. Clay and pug are common. The core from 256.0 - 256.68 is particularly broken with greater amounts of clay present.

256.68 - 267.24

MARBLE

The first section of core to 262.6 is mostly leached and fractured with abundant quantities of decomposed white mushy marble (pug).

However, the basal section is a fresh, grey marble.

Bedding is  $50^{\circ}$  to LCA @ 256.9

The last 40 cm is rubble (1 cm) and the preceding 90 cm of core is badly leached.

267.24 - 274.0

BIOTITE HORNFELS

Dark grey fine grained biotite hornfels disturbed in places, some bedding present:

Bedding is at  $55^{\circ}$  to LCA @ 270 m

30 cm of broken core from 269 m

274.0 - 281.6

GARNET SKARN

Poor core recovery and broken core, indicates a fault separating this unit from that above. Most of the core is present within the unit but there is only 50% recovery from 279.8 m where the recovered core is very broken.

All the core appears leached and generally shows signs of having had a significant water flow through it.

Scheelite is finely disseminated through the rock and is probably grade. The first 1.3 m only contains trace amounts of  $WO_3$ .

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

281.6 - 288.9

GARNET SKARN

The core is very broken from 281.6 - 282.5 but this does contain some scheelite. Fair mineralisation is present from 282.5 - 284 m in khaki brown leached garnet skarn. Patchy scheelite is present in the rest of the section. From 285.9 m to 288.2 the core is again entirely broken and is recovered as rubble.

From 288.2 m on the core is competent garnet hornfels with some biotite hornfels coming in possible pods.

288.97 - 299.5

FAULT MATERIAL

The first 50 cm of core is leached and weathered garnet hornfels, poorly mineralised to about 0.3%  $WO_3$ . The remainder of the core is rubble, and fragmented rock and gravel. A few large pieces are up to 5 cm long, these are composed of biotite hornfels. Apart from the first section none of this is mineralised.

299.5 - 306.5

BIOTITE PYROXENE HORNFELS

Well and thinly bedded massive interbedded biotite and pyroxene hornfels.

Bedding is at  $70^\circ$  to LCA @ 301 m  
" "  $64^\circ$  " 305 m

306.5 - 308.62

APLITE

Slightly leached, and fractured fine grained aplite.

308.62 - 311.7

BIOTITE PYROXENE HORNFELS

Much the same as the unit above the aplite except that a small amount of scheelite is present between 309.9 and 310.

Bedding is  $66^\circ$  to LVA @ 310.4 m

311.7 - 319.0

QUARTZITES

A 40 cm zone of rehealed fracture zone separates this unit from the biotite pyroxene hornfels above. Probably representing a fault. The quartzites are a pale grey colour, fine grained. At 317.5 m there is biotite defined fabrics running @  $50^\circ$  to LCA.

Generally only small amounts of pyrite are present.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 250/2

319.0 - 333.0

APLITE

Mostly a medium grained (up to 5 mm) grey aplite, Potash Feldspar is rare. Green chloritic alteration is present at the top contact.

From 328.3 m the aplite alternates with a pale grey fine grained quartzite at intervals of approximately 0.8 - 1.0 m

333.0 - 349.58

QUARTZITES

This is the same rock type as interbanded with the aplite.

i.e. fine grained, pale grey and with little pyrite initially.

Traces of scheelite are present from 339 m onwards, but never reach ore grade.

From 338.8 - 339.2 the core shows a deformed deformed clastic texture. At clasts about 0.5 cm long are elongated and lie in a fabric at 30° to LCA

High concentrations of pyrrhotite with subsidiary chalcopyrite are present from 339.3 - 339.8 and from 346.3 - 349.0 m.

349.58 - 356.0

BIOTITE HORNFELS

Block fine grained biotite hornfels, initially well bedded with partings along bedded planes.

Bedding is @ 64° to LCA at 349.9 m

Below 355.2 the core is heavily silicified and contains some pyrite.

356.0 - 356.7

APLITE

Medium grained (0.7 cm grain size) black and white aplite. Pink orthoclase crystals are rare.

EOH 356.7 m

Hole abandoned due to repeated cave ins from faults earlier in the hole.

FOLD

BOLD HEAD DDH # 250/2

DATE SURVEYED > 17\*01\*80

HEWLETT-PACKARD  
9280-0180  
FOR USE ON HEWLETT-PACKARD RECORDERS

R.L 1100.0

R.L 1000.0

R.L 500.0

R.L 500.0

764.2

EDH

EDH

10250

05E04

PLAN  
SECTION

SURV METHOD :SS

FINAL DEPTH 274.0  
SURVEY DEPTH 274.0

CASING DEPTH 274.0

COL 40400.0 10249.0  
EDH 40400.3 10250.3

FOLD

DDH BH 250/2

5.40 — 13.85 m.



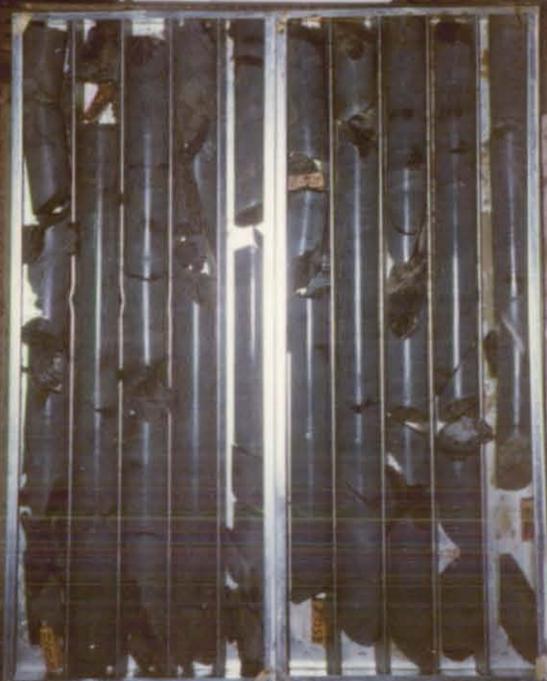
DDH BH 250/2

13.85 — 20.80 m.



DDH BH 250/2

20.80 — 28.66 m.



DDH BH 250/2

28.66 — 39.43 m.



DDH BH 250/2

39.43 — 51.37 m.



DDH BH 250/2

51.37 — 62.49 m.



DDH BH 250/2

62.49 — 74.50 m.



DDH BH 250/2

74.50 — 87.10 m.



DDH BH 250/2

87.10 — 97.20 m.



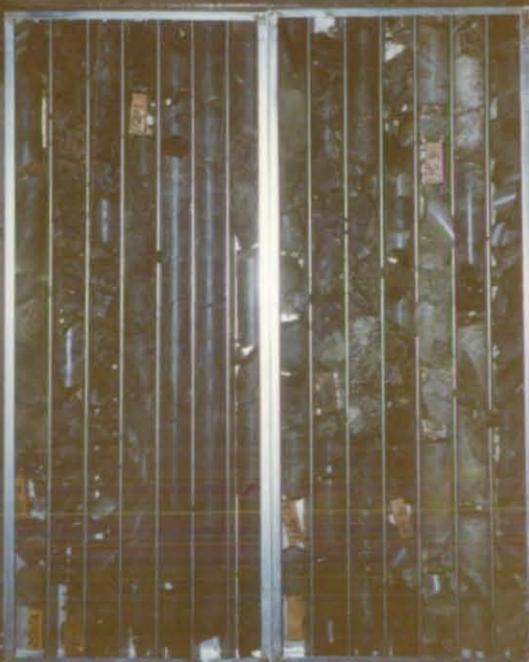
DDH BH 250/2

97.20 — 109.08 m.



DDH BH 250/2

109.08 — 119.90 m.



DDH BH 250/2

119.90 — 131.00 m.



DDH BH 250/2

131.00 — 143.70 m.



DDH BH 250/2

143.70 — 154.46 m.



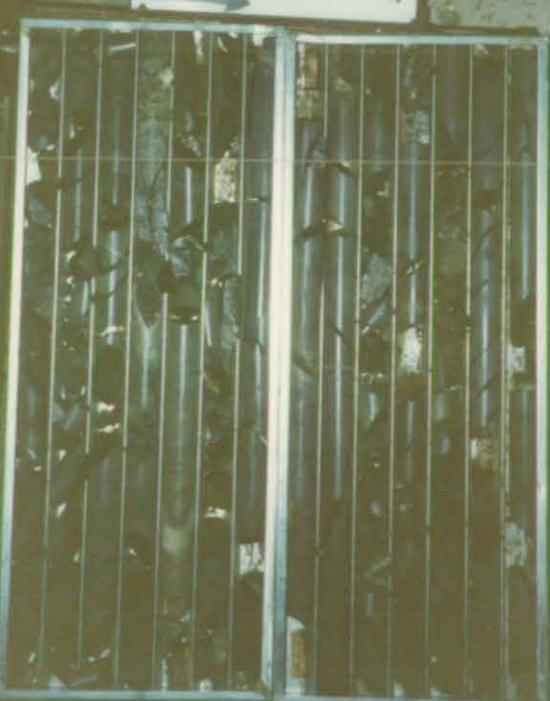
DDH BH 250/2

154.46 — 165.65 m.



DDH BH 250/2

165.65 — 175.61 m.



DDH BH 250/2

175.61 — 184.74 m.



DDH BH 250/2

184.74 — 194.66 m.



DDH BH 250/2

194.66 — 204.45 m.



DDH BH 250/2

204.45 — 214.98 m.



DDH BH 250/2

214.98 — 226.89 m.



DDH BH 250/2

226.89 — 237.77 m.



DDH BH 250/2

237.77 — 252.20 m.



DDH BH 250/2

252.20 — 266.00 m.



DDH BH 250/2

266.00 — 281.65 m.



DDH BH 250/2

281.65 — 288.97 m.



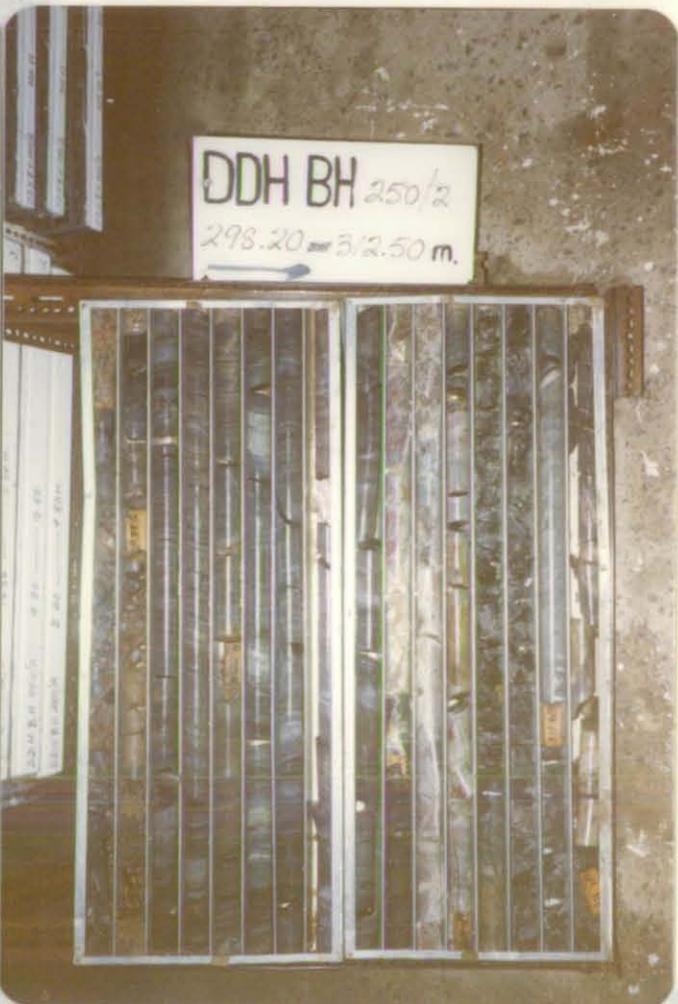
DDH BH 250/2

281.65 — 298.20 m.



DDH BH 250/2

298.20 — 312.50 m.



DDH BH 250/2

312.50 → 327.87 m.



DDH BH 250/2

327.57 → 342.43 m.



DDH BH 250/2

342.43 → 356.70 m.



GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. BH 250/1

**PLANNING** Proposer: .. M. Danielson ..... Depth: 300 m .....  
Location: .. Paddock immediately South of Grahams Road .....  
.....  
Purpose of Hole: Test extension of Bold Head orebody southwards.  
Co-ords: ..... 40350 ..... E ..... 10250 ..... N  
Inclination: .. -90° .....  
Bearing: ..... 360° ..... °Grid ..... °Mag  
Target: ..... E ..... N  
Depth: .....  
Approved by: .. M.C.R. .... Date: .. 1-12-1977 ..

SURVEY

Survey Co-ords: ..... E ..... N  
Surveyed Bearing: ..... 90° ..... °Grid ..... °Mag  
Surveyed in by: ..... Date .....  
Actual Co-ords: ..... 40350.12 ..... E ..... 10249.60 ..... N  
R.L. of Collar: ..... 1118.63 ..... 220,311.9 E ..... 566,870.6 N  
Inclination of Hole: -89° 04' (bearing 90°)  
Picked up By: .. A. Stewart ..... Date 21-2-1977 ..

SUMMARY

Logged By: ..... J. M. Clark ..... Date .....  
Results: ..... No economic intersection, Mine series at base  
..... of hole. ....  
.....  
.....

DRILLING

Date Commenced: ..... 8-12-1977 ..... Date Terminated ..... 23-6-1978 .....  
Driller/Contractor .. A.D.D. ....

Casing:	Size :	HQ	NQ	BQ	
	Depth :	9	144	150	
Core:	Size :	HQ	NQ	BQ	AQ
	Depth :	9m	17m	150	261

Wedge Runoff: No Core

Wedge placed: 7-6.1978 Depth Top 231.0 m  
Proposed by: A.D.D. Approved by

Reason Bottom of hole blocked by gear stuck just below clay filled fault.

**Extension:**

Final Depth: 261.0 m

Reason for Termination: Too much gear lost down hole.

**Condition of hole on completion:**

Casing; Gear at 261m, 150m (casing)

Cemented:

Bore hole survey: Singleshot Camera

Water:

Comments on Drilling Conditions: Upper Volcanics very broken with possible clay and brecciated fault zones which kept caving in.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 250/1

Survey method: Singleshot Camera  
Final depth: 261.0 m  
Casing depth: 150.0 m

Depth surveyed to: 245.0 m  
Date surveyed :  
Surveyed by: L. Denby  
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
25	110	82	1° 30'	-88.5°			
37.5					37.49	-0.34	0.92
50	66	38	0° 45'	-89.25°			
71					70.99	-0.16	1.32
92	60	32	1° 15'	-88.75°			
110					109.98	0.27	2.06
128	17	349	1° 45'	-88.25°			
156					156.46	1.63	2.45
185	353	325	2°	-88.0°			
200					199.93	3.14	2.26
215	317	289	4° 15'	-85.75°			
230					229.85	4.77	0.74
245	305	277	5° 30'	-84.5°			
261					260.71	6.47	-1.69

REMARKS:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 250/1

0.0 - 8.00 m

NO CORE

8.00 - 209.80 m

UPPER VOLCANICS

Fine grained, dark green or greyish green basalts are commonly spotted.

8.0 - 9.0 m. Weathered yellowish brown basalt.

9.0 - 12.5 m. Joints and fractures are stained yellowish brown and core is yellowish dark green.

18.0 - 19.6 m. Broken core with approximately 30 cm of core lost.

24.5 m. Broken core.

25.8 - 26.4 m. Recemented breccia, parts of which are very soft and fine grained.

25.8 - 34.7 m. Badly broken core with 2 m of core lost in this interval.

47.5 - 53.0 m. Badly broken core.

47.5 - 47.8 m. Recemented breccia with shear plane at 25° to core axis.

48.1 - 48.7 m. Recemented breccia.

49.0 m. Recemented breccia with shear plane at 55° to core axis.

49.9 - 50.1 m, 50.5 - 50.7 m, 51.9 - 52.0 m Recemented breccias.

56.6 - 56.8 m. Recemented breccia with shear planes (at 25° to core axis) and calcite veining.

59.0 m, 60.0 m. Minor brecciation.

62.5 - 62.6 m. Broken chloritic core.

62.7 - 62.8 m. Recemented breccia with matrix of light brown clay. Possible shearing at 10° to core axis.

65.5 - 65.6 m. Minor brecciation.

64.0 - 69.0 m. More intense spotting and larger spots (up to 5mm diameter).

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 250/1

69.4 - 69.5 m. Broken core.

74.3 m. Minor broken core.

32.0 m. Possible stratigraphic feature at 60° to core axis. (?Bedding)

89.8 - 90.1 m. Broken core.

104.0 - 104.2 m, 104.4 m - 104.6 m. Minor broken core.

109.2 - 109.3 m. Dark grey, very fine grained hornfels, belong to the Upper sediments.

115.0 - 118.2 m Broken core

120.9 - 121.1 m Broken core

123.8 - 124.0 m Broken core

127.5 - 132.8 m Broken core which is mildly weathered (i.e. is a lighter green colour and spots are reddish black). Recemented breccias are present 131.2 - 131.8

135.7 - 149.0 m. Very broken core with 5 m of core lost resulting in 64% recovery. Recemented breccias are present but in most places core is breaking up along shear planes at low angles to the core axis.

Below this very fractured and faulted zone, the core once again becomes fine grained, dark greyish green, spotted basalt.

158.0 - 159.0 m. No core recovered.

170 - 176.0 m. Agglomeratic tecture in greyish green basalt. From 176.0 - 188.0 m the agglomeritic texture is less distinct but still present, while from 188.0 - 209.8 m it is very pronounced.

181.1 m Broken core

188.3 - 188.7 m, 189.0 m Broken core with tectonic brecciation

193.0 - 193.2 m, 193.4 m Broken core with minor tectonic brecciation.

194.2 - 194.6 m. Breccia recemented in matrix of green tremolite, pyrrholite and muscovite.

195.8 m. Calcite vein at 20° to core axis.

197.4 - 197.5 m. Aplite.

201.3 - 202.7 m. Only 40cm of very broken and clayey core recovered.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. B250/1

207.0 - 209.8 m. Basalt becomes more green in colour and has agglomeritic texture.

Fractures / m = av 6  
Recovery = 94%

209.80 - 220.7 m

APLITE

Fine to medium grained light pink aplite, with short lengths of coarser grained adamellite. Minor red ironstaining is present at both ends of the unit. The mafic minerals present are hornblende and biotite.

Fractures / m = 10  
Recovery = 97%

220.70 - 256.20 m

UPPER VOLCANICS

Usually a dark grey spotted basalt except for short lengths of a green agglomeritic basalt. Spots are up to 5 mm in diameter, have irregular shape, and are dark red to black in colour.

226.0 - 232.0 m. Green agglomeritic basalt which is mildly weathered.

226.9 - 228.0 m. Broken core with short lengths of recemented breccia and minor clay.

228.0 - 228.3 m. Light pink aplite.

228.3 - 228.6 m. Broken core.

230.0 - 231.1 m. Broken core with 70cm of core loss.

231.9 - 232.6 m. Clay containing small rock chips and short lengths of recemented breccia.

246.0 - 246.1 m. Broken core.

249.0 - 249.1 m. Broken core.

250.0 - 254.0 m. Minor red ironstaining along fractures.

254.0 - 256.20 m. Green basic volcanic which appears to be very sheared, and broken. Minor fine grained molybdenite is present throughout this section.

255.4 m Recemented breccia with shearing at 30° to core axis.

Fractures / m = 3 - 10  
Recovery = 97%

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 250/1

256.20 - 259.50 m

BIOTITE HORNFELS

Purplish brown biotite hornfels with small lenses of  
of green pyroxene hornfels.

256.2 - 256.4 m. Very broken biotite hornfels.

256.4 - 257.0 m. Clay containing small rock fragments.

257.0 - 257.05m. Coarser grained fragments in matrix of  
clay.

258.3 m. Broken core.

259.0 - 259.5 m. Broken core, with only 20cm recovered.

Core is pyroxene calcite hornfels with medium grained  
disseminated powellite.

Fractures / m = 5 (in good core)

Recovery = 85%

EOH 259.50 m.

NOTE:

Bit, barrel inner tube and overshot at bottom of hole.

Wedging was attempted. Top of wedge at 231.0 m.

Wedge, bit, reamer and base of barrel stuck in hole.

Hole abandoned.

GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. BH 250/1 WR01

**PLANNING**

Proposer: ..... Depth: .....  
Location: .....  
.....  
Purpose of Hole: .....  
Co-ords: ..... E ..... N  
Inclination: .....  
Bearing: .....°Grid .....°Mag  
Target: ..... E ..... N  
Depth: .....  
Approved by: ..... Date: .....

SURVEY

Survey Co-ords: ..... E ..... N  
Surveyed Bearing: .....°Grid .....°Mag  
Surveyed in by: ..... Date .....  
Actual Co-ords: ..... E ..... N  
R.L. of Collar: .....  
Inclination of Hole: .....  
Picked up By: ..... Date .....

SUMMARY

Logged By: ..... J. M. Clark ..... Date .....  
Results: ..... hole to be wedged again.....  
.....  
.....  
.....

DRILLING

Date Commenced: ..24-6-1978..... Date Terminated..8-8-1978.....  
Driller/Contractor ..A.D.D.....

Casing:	Size :			
	Depth :			
Core:	Size :	AQ		
	Depth :	236.0 - 257.35m		

Wedge Runoff:  
Wedge placed: 24.6.78                      Depth Top 231.0 m  
Proposed by: A.D.D.                      Approved by  
Reason .                      Bottom of hole blocked by gear  
Extension:                      236-257.35 m  
Final Depth:                      257.35 m  
Reason for Termination:                      Wedge shifted and hole could not be re-entred.

Condition of hole on completion:  
Casing;  
Cemented:  
Bore hole survey:                      Not surveyed  
Water:

Comments on Drilling Conditions:                      Relatively good.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 250/1 WR01

236.00 - 257.15 m

UPPER VOLCANICS

Greenish grey basic Upper Volcanics with many irregular to lens - shaped red spots (up to 8mm diameter). Agglomeritic breccias are present at 236.0 - 237.0 m and 241.5 - 244.5 m. Most fractures are coated with red iron-oxides.

253.5 - 253.8 m. Calcite filled breccia and ?shear zone subparallel to the core axis.

254.5 - 257.15 m. Volcanics are dark green colour and appear to be intensely sheared. Shear and clay breccia zones (at 45° to core axis) containing molybdenite and minor pyrite are present at 255.3 - 255.6 m, 255.9 - 260.0m, 256.3 m - 256.8 m (less intense) and 256.9 - 257.15 m. Between 255 - 257.35 m there has been 50cm of core lost.

Fractures / m = 7  
Recovery = 97%

257.15 - 257.35 m

BIOTITE HORNFELS

Severely disturbed dark and light brown biotite hornfels. Shearing appears to be at 30° to core axis.

E.O.H. 257.35 m.

N.B. When the wedge was first placed there was trouble cementing it in, and movement of the wedge resulted in a bit and reamer being stuck on the end of the wedge. Work on the hole was delayed until a meeting between A.D.D. and Geopeko was held. The bit and reamer were removed from the end of the wedge, which was cemented again. A successful wedging operation took place (using a bull nosed bit this time) and the hole WR01 proceeded. Unfortunately at 257.37 m down WR01, the wedge shifted and this branch could no longer be entered. The original wedge was then rammed down the hole and a wooden wedge was placed on top of it.

8.9 ROD LINE

HQ CASING  
15 m/s

135 m/s

N 9 148 m/s

BXT1  
SLEEVE

150 m/s

A 9 ROD LINE

Branch Hole  
231 m/s

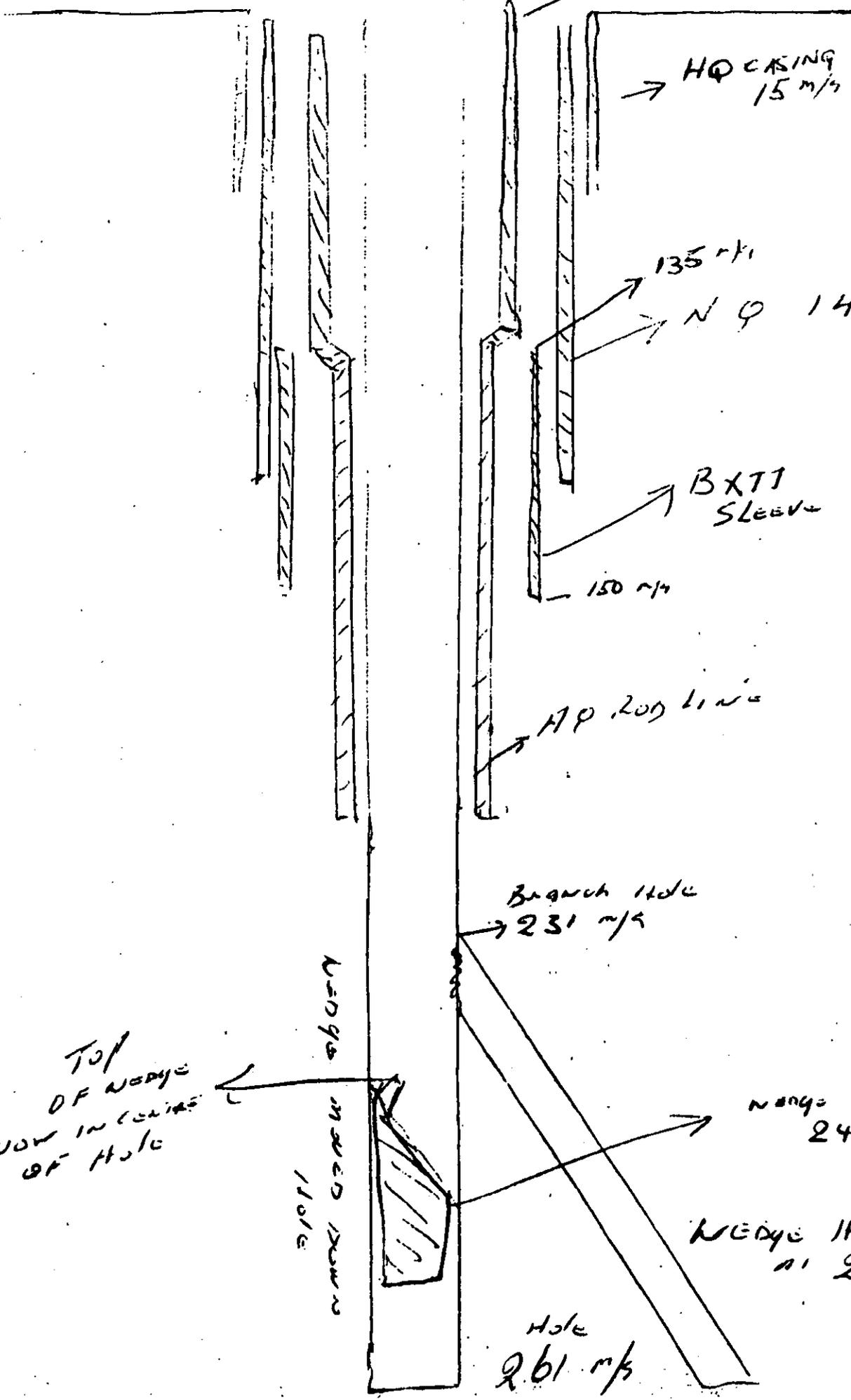
Wedge now at  
245.70 m/s

WEDGE Hole  
at 257.30  
m/s

Hole  
261 m/s

TOP  
OF WEDGE  
NOW IN CENTER  
OF Hole

Wedge moved down  
100'



GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. 250/1. WRO2

**PLANNING**

Proposer: ..... Depth: .....  
Location: .....  
.....  
Purpose of Hole: .....  
Co-ords: ..... E ..... N  
Inclination: .....  
Bearing: ..... °Grid ..... °Mag  
Target: ..... E ..... N  
Depth: .....  
Approved by: ..... Date: .....

**SURVEY**

Survey Co-ords: ..... E ..... N  
Surveyed Bearing: ..... °Grid ..... °Mag  
Surveyed in by: ..... Date .....  
Actual Co-ords: ..... E ..... N  
R.L. of Collar: .....  
Inclination of Hole: .....  
Picked up By: ..... Date .....

**SUMMARY**

Logged By: J. M. Clark ..... Date .....  
Results: 260-262m, 2m at 0.57% WO<sub>3</sub>, 0.05% Mo .....  
293-295m, 2m at 0.90% WO<sub>3</sub>, 0.05% Mo .....  
304-307m, 3m at 0.48% WO<sub>3</sub>, 0.01% Mo .....  
318-320m, 2m at 0.45% WO<sub>3</sub>, 0.01% Mo .....

**DRILLING**

Date Commenced: 7-8-1978 ..... Date Terminated: 28-8-1978 .....  
Driller/Contractor A.D.D. ....

Casing:	Size :			
	Depth :			
Core:	Size :	AQ		
	Depth :			

Wedge Runoff:  
Wedge placed: 7-8-1978 ..... Depth 246.0  
Proposed by: ..... Approved by  
Reason WRO1 could not be re-entered

Extension: 246-349.27 m  
Final Depth: 349.27 m  
Reason for Termination: In adamellite

Condition of hole on completion:

Casing;  
Cemented: Yes

Bore hole survey: At 268 m. Hole caved in below this and could  
Water: not get camera down...

Comments on Drilling Conditions:

Very broken banded footwall beds.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 250/1 WRO2

Survey method: Single Shot  
Final depth: 349.27 m  
Casing depth: 150.0 m

Depth surveyed to: 268.0 m  
Date surveyed: 19-8-78  
Surveyed by: L. Denby  
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
246 m					245.78	5.65	-0.51
268	324	296	8° 00'	-82.0			
349					347.78	17.25	-8.94

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. 250/1 WRO2

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			AVERAGE			Depth (m)
Original Sample No.		WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	
BH 6626				BH 6674	0.02	< 0.01	BH 6675	0.01			0.01	<0.01	258-259
6627				6676	0.25	0.04	6677	0.21			0.23	0.04	259-260
6628				6678	0.62	0.05	6679	0.59			0.60	0.05	260-261
6629				6680	0.55	0.05	6681	0.53			0.54	0.05	261-262
6630				6682	0.04	0.02	6683	0.08			0.06	0.02	262-263
6631				6684	0.15	0.02	6685	0.14			0.14	0.02	263-264
6632				6686	<0.01	<0.01	6687	<0.01			<0.01	<0.01	264-265
6633				6688	<0.01	<0.01	6689	<0.01			<0.01	<0.01	265-266
6634				6690	<0.01	<0.01	6691	<0.01			<0.01	<0.01	291-292
6635				6692	0.06	0.03	6693	<0.01			0.03	0.03	292-293
6636				6694	1.28	0.07	6695	1.31			1.29	0.07	293-294
6637				6696	0.46	0.04	6697	0.57			0.51	0.04	294-295
6638				6698	<0.01	<0.01	6699	0.01			<0.01	<0.01	295-296
6639				6700	<0.01	<0.01	6701	0.01			<0.01	<0.01	296-297
6640				6702	0.01	<0.01	6703	0.03			0.02	<0.01	297-298
6641				6704	0.23	0.02	6705	0.25			0.24	0.02	298-299
6642				6706	0.08	0.02	6707	0.10			0.09	0.02	299-300
6643				6708	0.13	0.02	6709	0.16			0.14	0.02	300-301
6644				6710	0.01	<0.01	6711	0.05			0.03	<0.01	301-302
6645				6712	0.39	0.03	6713	0.35			0.37	0.03	302-303
6646				6714	0.15	0.02	6715	0.21			0.18	0.02	303-304
6647				6716	0.42	0.01	6717	0.41			0.41	0.01	304-305
6648				6718	0.37	0.01	6719	0.32			0.34	0.01	305-306
6649				6720	0.65	0.01	6721	0.72			0.68	0.01	306-307
6650				6722	0.11	<0.01	6723	0.12			0.11	<0.01	307-308
6651				6724	<0.01	<0.01	6725	<0.01			<0.01	<0.01	308-309
6652				6726	<0.01	<0.01	6727	0.01			<0.01	<0.01	309-310

NOTE: Original K.I.S. and K.I.S. Check assays were incorrect (~20% low).  
The Check assays listed above have been reassayed.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. 250/1 WRO2

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMTEL			AVERAGE			Depth (m)
Original Sample No.		WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	Check Sample No.	WO <sub>3</sub>	Mo	
BH 6653				BH 6728	0.36	< 0.01	BH 6729	0.19			0.27	< 0.01	317-318
6654				6730	0.34	< 0.01	6731	0.30			0.32	< 0.01	318-319
6655				6732	0.66	0.01	6733	0.49			0.57	0.01	319-320
6656				6734	0.25	0.01	6735	0.30			0.27	0.01	320-321
6657				6736	< 0.01	< 0.01	6737	< 0.01			< 0.01	< 0.01	321-322
6658				6738	0.26	< 0.01	6739	0.22			0.24	< 0.01	322-323

NOTE: Original K.I.S. and K.I.S. Check assays were incorrect (~ 20% low).  
The Check assays listed above have been reassayed.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 250/1 WRO2

249.0 - 256.75m

UPPER VOLCANICS

Greyish green Upper Volcanics with distinct dark red spots up to 5mm diameter. Minor ironstaining is present along fractures.

254.0-256.75m. Volcanics are a lighter green in colour and are severly brecciated. Minor molybdenite is present in this zone.

256.7-256.75m. Fault is 38° to the core axis and consists of fragments up to 8mm in diameter in a very light green clay matrix.

Fractures / m = 10  
Recovery = 99%

256.75 - 259.85m

BIOTITE - PYROXENE HORNFELS

Purplish brown biotite hornfels with lesser amounts of green pyroxene hornfels. The beginning of the unit is mildly disturbed by shearing.

257.8 - 258.0m. Pyroxene-calcite-grossular hornfels.

At 259.4 m bedding is 55° to the core axis.

Fractures/m = 4  
Recovery = 99%

259.85 - 263.95m

GARNET - PYROXENE HORNFELS

Andradite and grossular garnet are irregular concentrated in a matrix of dark green pyroxene and calcite. Grossular is more abundant towards the end of this unit.

Fine to medium grained scheelite is irregularly disseminated through the unit.

The longer intervals containing scheelite are 259.95-260.3 m, 260.45-260.55m, 260.6-260.9m, 261.1- 261.8 m, 261.85-262.0 m, 263.85-263.95m.

Fractures/m = 3  
Recovery = 99%

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. 250/1 WRO2

293.2-293.7 m. Fine to medium grained disseminated scheelite.

295.4 m. Broken core along small fracture.

298.0-303.9 m. Short lengths (up to 30cm) of core contains mildly to thickly disseminated fine grained scheelite, and have barren pyroxene garnet hornfels between them. The longer lengths containing scheelite are from 300.6-300.9m, 302.2-302.4m.

303.9-307.0 m. Abundant fine grained thickly disseminated scheelite with only short lengths of barren rock between those mineralized portions.

Fractures / m = 3  
Recovery = 99%

307.00 - 323.20 m

BANDED FOOTWALL BEDS

Interbedded biotite hornfels, pyroxene hornfels, marble and garnet hornfels.

The unit gives the appearance of being very weathered as marble between 311-319 m is stained orange and core throughout the unit is very broken.

Between 314-317 m, 2m of core has been lost, probably 314.5-316.5m. Core is very broken and there are small lengths of recemented breccias. Some surfaces have slickensides.

318.5-320.4 m. Bedded garnet hornfels comprises about half the unit with pyroxene and biotite hornfels. Fine grained disseminated scheelite is present in the andradite rich sections.

322.0-323.0 m. Broken core.

Fractures / m = 20  $\frac{14}{16}$   
Recovery =  $\frac{14}{16}$

323.20 - 349.27 m

ADAMELLITE

The beginning of the unit 323.2 - 323.6 m is very fine grained and short sections have weathered to clay.

329.2-331.0 m. Very weathered "adamellite" containing minor medium to coarse grained scheelite. This section is dark brown with minor white feldspars. Between 330.2-330.5 m core is broken and sheared, and contains abundant chlorite and pyrite.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. 250/1 WRO2

263.95 - 268.80 m

MARBLE

Light grey fine to medium grained marble with fine black chlorite veins cross-cutting bedding.

264.6 m. Soft calcite vein.

268.4 - 268.8 m. Pyroxene, grossular and minor scheelite present in marble.

Fractures / m = 2  
Recovery = 100%

268.80 - 293.00 m

BIOTITE - PYROXENE HORNFELS

Purplish brown biotite hornfels with lesser amounts of green pyroxene hornfels and grey actinolite hornfels. Minor spotting is associated with actinolite and biotite hornfels.

The beginning of the unit, (268.0 - 271.4 m) contains small beds of marble and is very broken and ironstained. At 270.0 m there is a calcite vein at 20° to the core axis which may have minor movement associated with it.

276.0 - 276.3 m. Broken core

276.9 - 277.5 m. Very disturbed bedding.

Small light grey rock fragments are present at 289.1 - 289.2m and 291.9 - 292.5 m.

290.6 m. Large aggregate of pyrrhotite with small chlorite veinlets.

<u>Depth</u>	<u>Bedding/CA</u>
271.8m	65°
283.2m	65°
288.1m	70°

Fractures / m = 3  
Recovery = 99%

293.00 - 307.00 m

PYROXENE - GARNET HORNFELS

Rock fragments and rounded pods of calcite and calcite/actinolite are present in a matrix of pyroxene, grossular and calcite. A biotite rich matrix containing predominantly rock fragments is present near the beginning of the unit at 295.3-296.5 m.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. 250/1 WRO2

For the remainder of the unit, typical adamellite is present. This is a coarse grained rock containing white plagioclase, pink orthoclase, lesser amounts of quartz and relatively abundant biotite and hornblende.

349.0-349.27 m. Aplite.

Fractures / m = 4  
Recovery = 99%

EOH 349.27 m.

DDH BH 250/1  
00.00 — 20.00m.



DDH BH 250/1  
20.00 — 34.74m.



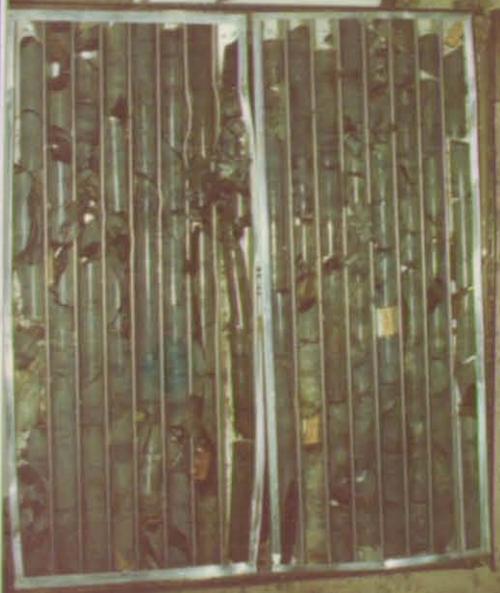
DDH BH 250/1  
34.74 — 48.56m.



DDH BH 250/1  
48.56 — 62.49m.



DDH BH 250/1  
6249-7700 m.



DDH BH 250/1  
7700-9168 m.



DDH BH 250/1  
9168-10637 m.



DDH BH 250/1  
10637-11990 m.



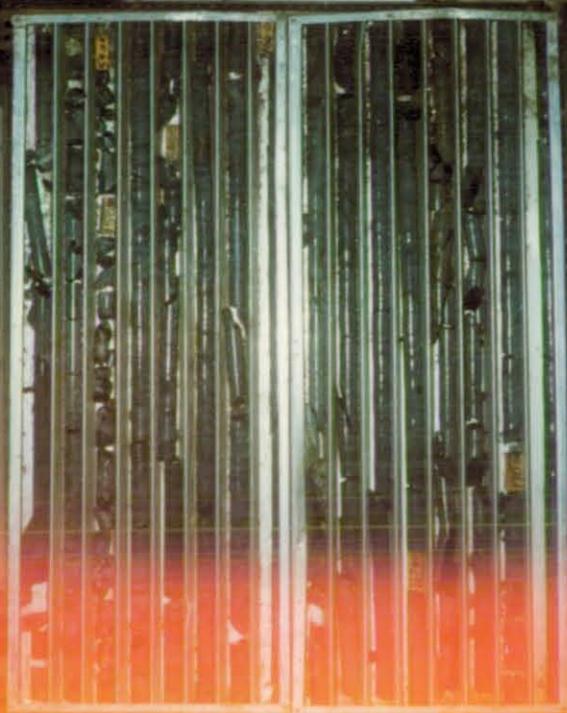
DDH BH 250/1  
119.90 - 135.55 m.



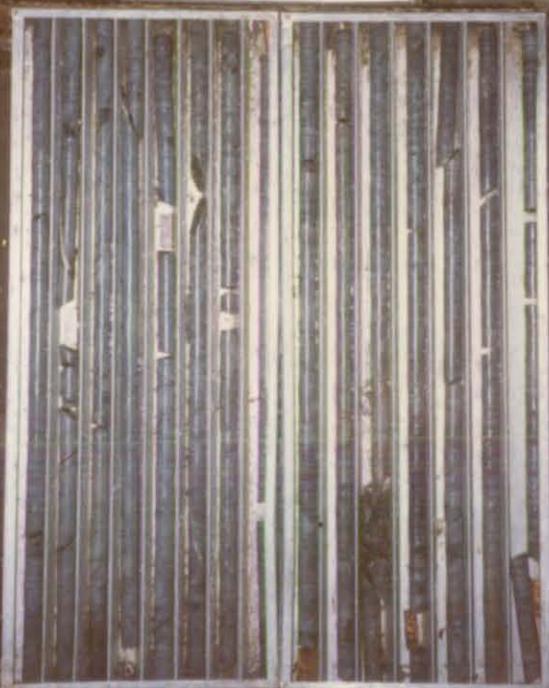
DDH BH 250/1  
136.50 - 155.40 m.



DDH BH 250/1  
155.40 - 171.58 m.



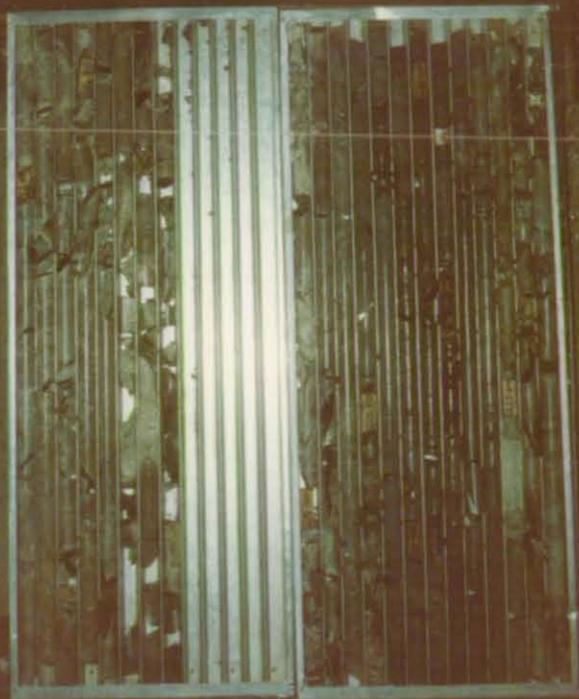
DDH BH 250/1  
171.58 - 185.76 m.



DDH BH 250/1  
185.76 — 211.27 m.



DDH BH 250/1  
211.27 — 230.10 m.



DDH BH 250/1  
230.10 — 254.31 m.



DDH BH 250/1  
254.31 — 259.10 m.



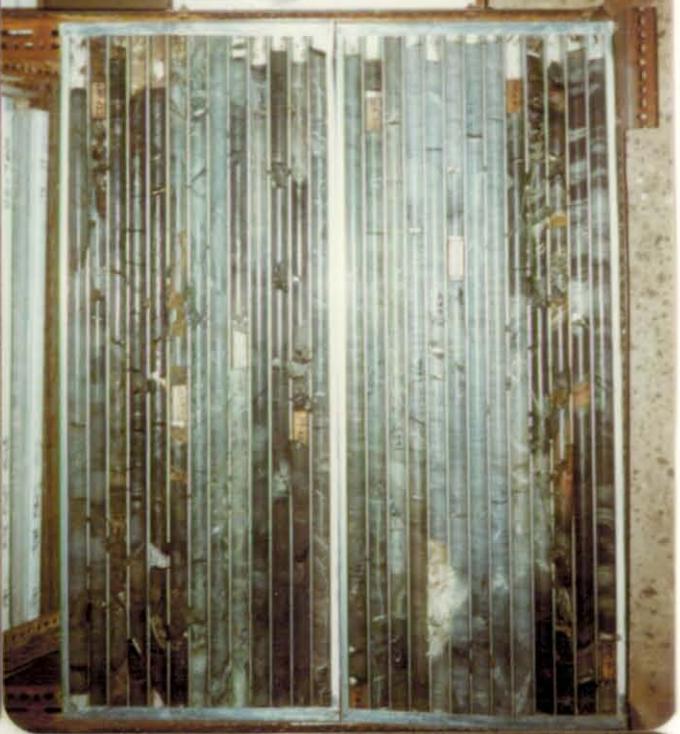
DDH BH <sup>250/1</sup>  
WRO 1

236.00 - 257.35m.



DDH BH <sup>250/1</sup>  
WRO 2

249.30 - 272.8m.



DDH BH <sup>250/1</sup>  
WRO 2

272.81 - 295.90m.



DDH BH <sup>250/1</sup>  
WRO 2

295.90 - 322.00m.



DDH BH 250/1  
WR02

322.00 — 345.44 m.



DDH BH 250/1  
WR02

E.O.H.  
345.44 — 349.27 m.



GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 200/1

PLANNING PROPOSER: J. M. Clark DEPTH: 400m  
LOCATION: Bold Head Surface  
PURPOSE OF HOLE: To Test Between Holes 250/1 and 150/1  
PROPOSED CO-ORDS: 40325 E 10200 N  
INCLINATION: -90°  
BEARING: ° GRID ° MAG  
TARGET: E N  
DEPTH:  
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N  
SURVEYED BEARING: ° GRID ° MAG  
SURVEYED IN BY: DATE:  
ACTUAL CO-ORDS: 40324.1 E 10199.3 N  
R.L. OF COLLAR: 1119.0 15c. 220303.1E 566814.6 N  
INCLINATION OF HOLE: -90  
PICKED UP BY: B. Lennon DATE: 13/6/79

SUMMARY LOGGED BY: R. E. Sandell Davies  
RESULTS: Mine Series rocks not encountered

DRILLING DATE COMMENCED: 12/6/79 DATE TERMINATED: 8/8/79  
DRILLER/CONTRACTOR: (A.D.D.)  
CASING: SIZE: HQ NQ  
DEPTH: 59m 222m  
CORE: SIZE: BQ  
DEPTH: 383m  
WEDGE PLACED: Nil DEPTH: PROPOSER:  
EXTENSION: Nil  
FINAL DEPTH: 383m  
REASON FOR TERMINATION: Hole Into Granite  
CONDITION OF HOLE ON COMPLETION:  
CASING: 22m Left in Hole NQ  
CEMENTED:  
BORE HOLE SURVEY: Single shot to 383m  
WATER: Lost some water. Total water loss at 268.5m  
COMMENTS ON DRILLING CONDITIONS: Bad

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 200/1

Surveyed method: Single shot  
 Final depth: 383.00  
 Casing depth: 222.00

Depth surveyed to: 383.00  
 Date surveyed: 9/8/79  
 Surveyed by: L. Denby  
 Checked by: S. G. Brown

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.		N	W
80	308°	280	0° 45'	-89° 15'	79.99	.65	.83
180	308°	280	0° 15'	-89° 45'	179.99	.92	1.18
230	308°	280	0° 30'	-89° 30'	229.99	1.19	1.53
280	148°	120°	0° 45'	-89° 15'	279.99	.63	1.18
330	258°	230°	1° 15'	-88° 45'	332.98	.39	2.31
383	290°	262°	0° 15'	-89° 45'	382.98	.31	2.52

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 200/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 16.0	16.0	1.0	6
16.0 - 18.2	2.2	2.2	100
18.2 - 20.5	2.3	2.3	100
20.5 - 23.0	2.5	2.5	100
23.0 - 25.5	2.5	2.5	100
25.5 - 27.2	1.8	1.8	100
27.2 - 28.5	1.3	1.3	100
28.5 - 29.5	1.0	1.0	100
29.5 - 30.5	1.0	1.0	100
30.5 - 31.9	1.4	1.4	100
31.9 - 34.4	2.5	2.5	100
34.4 - 38.6	4.2	4.2	100
38.6 - 40.7	2.1	2.1	100
40.7 - 42.8	2.1	2.1	100
42.8 - 45.4	3.6	3.6	100
45.4 - 46.8	1.4	1.4	100
46.4 - 49.4	2.6	2.6	100
49.4 - 52.2	2.8	2.8	100
52.2 - 55.1	2.9	2.9	100
55.1 - 57.4	2.3	2.3	100
57.4 - 60.1	2.7	2.7	100
60.1 - 62.6	2.5	2.5	100
62.6 - 65.0	2.4	2.5	100
65.0 - 68.0	3.0	3.0	100
68.0 - 71.0	3.0	3.0	100
71.0 - 72.8	1.8	1.8	100
72.8 - 76.0	3.2	3.2	100
76.0 - 79.1	3.1	3.1	100
79.1 - 81.1	2.0	2.0	100
81.1 - 84.2	3.1	3.1	100
84.2 - 87.3	3.1	3.1	100
87.3 - 90.4	3.1	3.1	100
90.4 - 93.5	3.1	3.1	100
93.5 - 96.7	3.2	3.2	100
96.7 - 99.8	3.1	3.1	100
99.8 - 102.3	2.5	2.5	100
102.3 - 104.4	2.1	2.1	100
104.4 - 106.0	1.6	1.5	94
106.0 - 107.2	1.2	1.2	100
107.2 - 110.5	3.3	3.3	100
110.5 - 113.6	3.1	3.1	100
113.6 - 116.1	2.5	2.5	100
116.1 - 119.0	2.9	2.9	100
119.0 - 122.0	3.0	3.0	100
122.0 - 125.0	3.0	3.0	100
125.0 - 128.0	3.0	3.0	100
128.0 - 131.0	3.0	3.0	100
131.0 - 134.0	3.0	3.0	100
134.0 - 137.0	3.0	3.0	100
137.0 - 140.0	3.0	3.0	100
140.0 - 143.0	3.0	3.0	100
143.0 - 146.0	3.0	3.0	100
146.0 - 147.5	1.5	1.5	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 200/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
147.5 - 105.2	2.7	2.7	100
105.2 - 153.3	3.1	3.1	100
153.3 - 156.4	3.1	3.1	100
156.4 - 159.5	3.1	3.1	100
159.5 - 163.2	3.7	3.7	100
163.2 - 165.4	2.2	2.2	100
165.4 - 166.5	1.1	1.1	100
166.5 - 167.5	1.0	0.8	80
167.5 - 169.0	1.5	1.5	100
169.0 - 172.0	3.0	3.0	100
172.0 - 173.3	1.3	1.3	100
173.3 - 174.4	1.1	1.1	100
174.4 - 176.7	2.3	2.3	100
176.4 - 178.9	2.2	2.2	100
178.9 - 181.2	2.3	2.3	100
181.2 - 184.8	3.6	3.6	100
184.8 - 187.9	3.1	3.1	100
187.9 - 190.5	2.8	2.6	93
190.5 - 191.5	1.0	1.0	100
191.5 - 192.4	0.9	0.9	100
192.4 - 194.3	1.9	1.9	100
194.3 - 197.0	2.7	2.7	100
197.0 - 200.0	3.0	3.0	100
200.0 - 202.7	2.7	2.7	100
202.7 - 205.3	2.6	2.6	100
205.3 - 207.8	2.5	2.5	100
207.8 - 210.1	2.3	2.3	100
210.1 - 211.6	1.5	1.5	100
211.6 - 214.7	3.1	3.1	100
214.7 - 217.8	3.1	3.1	100
217.8 - 221.0	3.2	3.1	97
221.0 - 222.0	1.0	1.0	100
222.0 - 224.0	2.0	2.0	100
224.0 - 227.0	3.0	3.0	100
227.0 - 230.0	3.0	3.0	100
230.0 - 231.9	1.9	1.9	100
231.9 - 235.0	3.1	3.1	100
235.0 - 237.1	2.1	2.1	100
237.1 - 240.2	3.1	3.1	100
240.2 - 243.4	3.2	3.2	100
243.4 - 246.5	3.1	3.1	100
246.5 - 250.3	3.8	3.8	100
250.3 - 252.2	1.9	1.9	100
252.2 - 255.2	3.0	3.0	100
255.2 - 258.2	3.0	3.0	100
258.2 - 262.0	3.8	3.8	100
262.0 - 263.0	1.0	1.0	100
263.0 - 266.6	3.6	3.5	97
266.6 - 268.0	1.4	1.4	100
268.0 - 269.5	1.5	1.2	80
269.5 - 271.5	2.0	2.0	100
271.5 - 273.1	1.6	1.6	100

## GEOLOGY - KING ISLAND SCHEELITE

## CORE RECOVERY

D.D.H. No. BH 200/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
273.1 - 274.5	1.4	1.4	100
274.5 - 279.2	4.7	4.7	100
279.2 - 280.7	1.5	1.5	100
280.7 - 283.3	2.6	2.6	100
283.3 - 284.0	0.7	0.7	100
284.0 - 287.7	3.7	3.7	100
287.7 - 294.0	6.3	6.3	100
294.0 - 297.2	3.2	3.2	100
297.2 - 300.0	2.8	2.8	100
300.0 - 302.0	2.0	2.0	100
302.0 - 304.0	2.8	2.7	96
304.8 - 306.3	1.5	1.5	100
306.3 - 308.2	1.9	1.9	100
308.2 - 311.0	2.8	2.8	100
311.0 - 314.0	3.0	3.0	100
314.0 - 315.4	1.4	1.4	100
315.4 - 317.1	1.7	1.5	88
317.1 - 319.2	2.1	2.1	100
319.2 - 321.0	1.8	1.7	94
321.0 - 323.4	2.4	2.3	96
323.4 - 325.1	1.7	1.7	100
325.1 - 326.6	1.5	1.4	93
326.6 - 329.1	2.5	2.5	100
329.1 - 330.5	1.4	1.3	93
330.5 - 334.0	3.5	3.5	100
334.0 - 337.0	3.0	3.0	100
337.0 - 340.0	3.0	3.0	100
340.0 - 342.1	2.1	2.0	95
342.1 - 346.8	4.7	4.0	85
346.8 - 349.0	2.2	2.0	91
349.0 - 352.1	3.1	3.0	97
352.1 - 354.4	2.3	2.1	91
354.4 - 357.0	2.6	1.7	65
357.0 - 359.0	2.0	2.0	100
359.0 - 362.4	3.4	3.4	100
362.4 - 366.8	4.4	4.4	100
366.8 - 369.0	2.2	1.6	73
369.0 - 371.4	2.4	1.0	42
371.4 - 374.1	2.7	1.9	70
374.1 - 375.3	1.2	1.0	83
375.3 - 376.9	1.6	1.6	100
376.9 - 380.0	3.1	2.8	90
380.0 - 382.0	2.0	2.0	100
382.0 - 382.8	0.8	0.8	100
EOH 382.8m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 200/1

- 15.0 - 56.59m META - VOLCANICS
- This is a uniform rock type, light grey in colour, though with a greenish tinge in the first 4m. Grain size is fine. In places the rock is shot through with filled fractures eg @ 26m.
- Metamorphic spotting is present at intervals eg 56m. Joints occur about 2/m usually and are chlorite lined.
- 56.59 - 100.83 META - VOLCANICS
- As above, good metamorphic spotting @ 90m, 1 or 2 flecks of scheelite @ 73.4m.
- 100.83 - 144.31 META - VOLCANICS
- As above. Extensively fractured and broken core from 100.5 - 111m. Development of clays and some slickenslides.
- Thin scheelite veins (1mm) at 115.2m and 140.3m. Thick clay filled joints at 122m, 127.5m, 133.5m.
- 144.31 - 187.30 META - VOLCANICS
- As above with clay filled joint at 150.2m, extensive fracturing @ 160m and 164.2 - 173.0m and @ 175m, 179m, 186 - 187.3m.
- 187.3 - 231.33 META - VOLCANICS
- As above. Core size decreases at 222m. Rock broken and fractured from 187.3 - 188m. At 190 - 194.2 there is much fractured and loose rock with extensive clay formation. Obviously a large fault.
- Thick clay filled joint at 200.0m. Moderate fracturing @ 206 and 210m. Possible garnet below 217m.
- 231.33 - 240.2 META - VOLCANICS
- As described in last section above. The rock is brecciated and resealed at 237m.
- 240.2 - 247.9 META - VOLCANICS
- These rocks have a distinctive green appearance, in contrast to the overlying grey rocks. The rocks are generally disturbed and give the impression of originally being a breccia. They are obviously rich in pyroxene.
- At 247m, 2cm with clay/breccia at 35° to LCA - a fault  
243.6 2cm wide clay/breccia filled fault 36° to LCA  
244.6 3cm wide clay/breccia fault at 24° to LCA.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 200/1

247.9 - 250.6

APLITE DYKE

This dyke has a pink colour, generally coarse grained and is quite competent.

250.6 - 267.9

META - VOLCANICS

Mostly of a green colour, though often a light grey to pale grey/green. In places eg 258m it clearly displays a lithified breccia texture.

Aplite dyke from 252.8 - 253.4m. A 35cm wide breccia-filled fault at 22° to LCA occurs at 259.2m.

267.9 - 268.0

META - VOLCANICS

This rock has a green colour, moderate grain size and is a continuation of the last unit.

268.0 - 283.47

APLITE

This dyke has a moderate grain size approx. 1mm, and is highly siliceous in parts. The upper 1m is well jointed and has some quartz lined open joints and cavities.

No mineralisation.

283.47 - 286.79

BASIC DYKE ? VOLCANICS

This dark fine grained rock has numerous approx. 1mm wide black spots on its surface due to oxidation and weathering of certain minerals. On a broken surface its very fine grained, intergranular aspect can be seen. The rock also feels denser.

The core is broken and fractured at the upper boundary of the dyke or Sill.

286.79 - 287.7

APLITE

A fine grained highly siliceous intrusion.

287.7 - 288.13

BASIC DYKE

As described above.

288.13 - 289.96

APLITE DYKE

289.96 - 298.87

VOLCANICS

This rock is mostly fine grained medium grey to green and is disturbed in places. Apart from some vague banding, structures are absent.

The rock is fractured and brecciated at 292.9m, 295.1m, and is badly jointed at around 296.7m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 200/1

298.87 - 309.78

?GRANITE

This pinkish rock has a moderate to coarse (3mm) grain size. It is equigranular and intergranular in texture and shows red, iron oxidation stains. The upper most 2.5m is badly broken (loose) fractured (cracked) and brecciated.

309.7 - 311.22

APLITE

Medium grained pale pink.

311.22 - 319.4

VOLCANICS

Fine grained and steel grey in colour. It commonly has a clastic texture. The core is very broken and rubbly from 314 - 318m.

319.4 - 324.5

APLITE

Generally fine grained, but a coarse grained section occurs at 319.9 - 320.3m

324.5 - 326.77

VOLCANICS

Steel grey to buff colour. Most of the core has a clastic texture. Large joint at 324.6m

326.77 - 334.0

APLITE

Fine grained and pinkish in colour. The core is very broken and rubbly from 328.67 - 333m. Clay minerals and slickenslides are present.

334.0 - 344.9

VOLCANICS

The first 3m are buff coloured with a clastic texture and often brecciated in addition. Below this the rock is light - dark steel grey, fine grained and often brecciated.

Metamorphic spotting is well developed.

346.5 - 348.5

VOLCANICS

Steel grey in colour, fine grained and often showing small (2mm) black metamorphic spots. The lower section, last 1m has a clastic texture.

348.5 - 354.03

APLITE

Medium grained, and pink to creamy in colour.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 200/1

354.03 - 372.44 VOLCANICS

Subdivided as:

- 354.03 - 356.4 Loose and rubbly core probably faulted.  
356.4 - 358.7 Steel grey, fine grained volcanics with metamorphic spotting.  
358.7 - 361.6 A volcanoclastic, now very disturbed by jointing and fracturing. Chlorite slickenslides at base indicate faulting.  
361.6 - 364.2 Aplite  
Rather fractured and with a medium grain size.  
364.2 - 372.44 Volcanics  
The first 40cm is a rehealed breccia zone, dominantly cream and green in colour. The remainder is a volcanoclastic rock.

372.44 - 382.8 GRANITE

This is a coarse grained (0.5cm) intrusive rock. Some orthoclase crystals are 1cm long. Zones in the upper section of this unit are very fractured and rubbly with clay minerals developed.

There is no mineralisation in any of this core.

EOH 382.8m

DDH BH<sub>200/1</sub>

15.00 — 26.90 m.



DDH BH<sub>200/1</sub>

26.90 — 37.77 m.



DDH BH<sub>200/1</sub>

37.77 — 49.90 m.



DDH BH<sub>200/1</sub>

49.90 — 62.34 m.



DDH BH<sub>200/1</sub>  
62.34 — 75.05 m.



DDH BH<sub>200/1</sub>  
75.05 — 87.86 m.



DDH BH<sub>200/1</sub>  
87.86 — 100.83 m.



DDH BH<sub>200/1</sub>  
100.83 — 112.40 m.

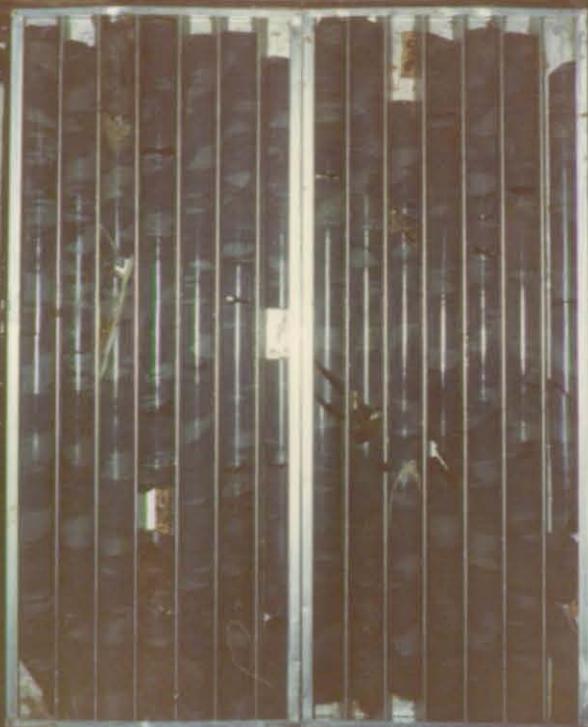


DDH BH 200/1

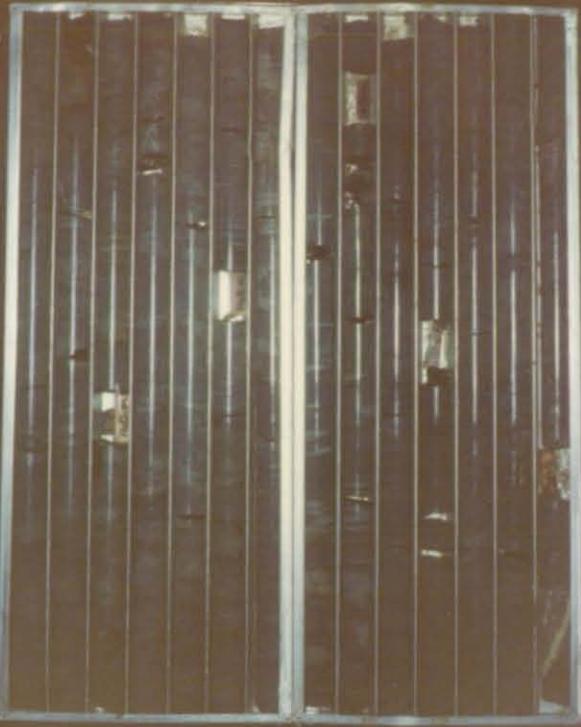
112.40 — 125.00 m.



DDH BH<sub>200/1</sub>  
125.00 — 137.70 m.



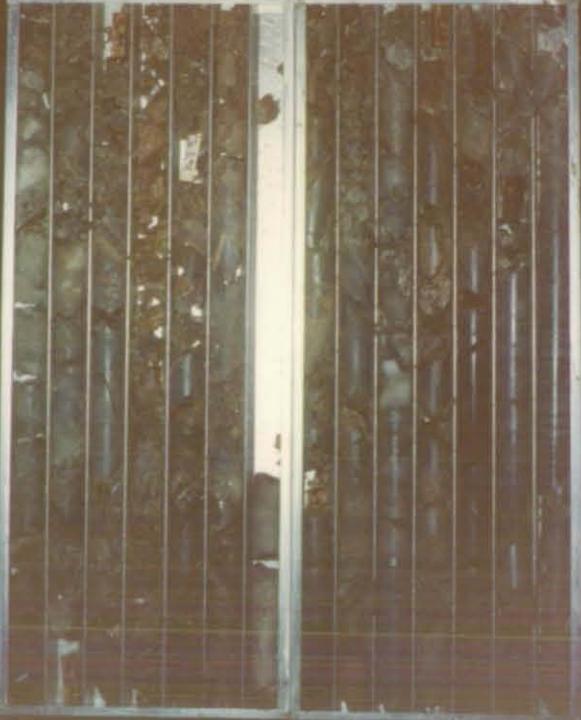
DDH BH<sub>200/1</sub>  
137.70 — 150.82 m.



DDH BH<sub>200/1</sub>  
150.82 — 164.54 m.

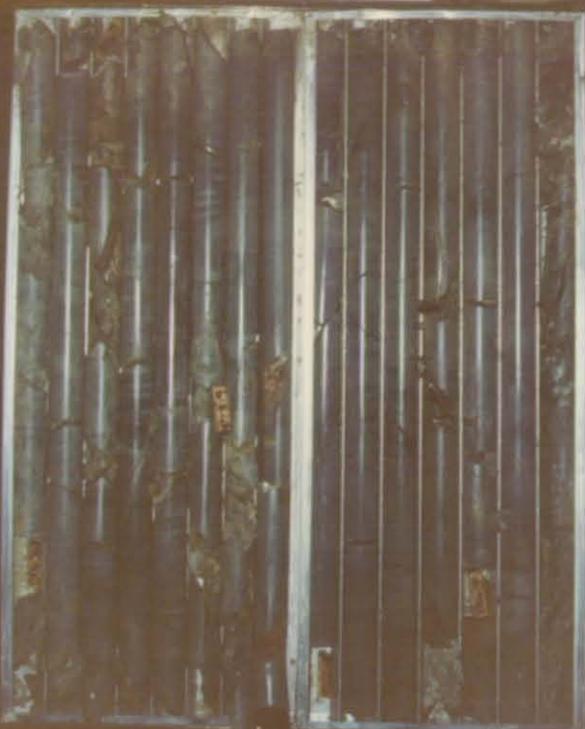


DDH BH<sub>200/1</sub>  
164.54 — 174.30 m.



DDH BH<sub>200/1</sub>

174.30 — 187.30 m.



DDH BH<sub>200/1</sub>

187.30 — 199.05 m.



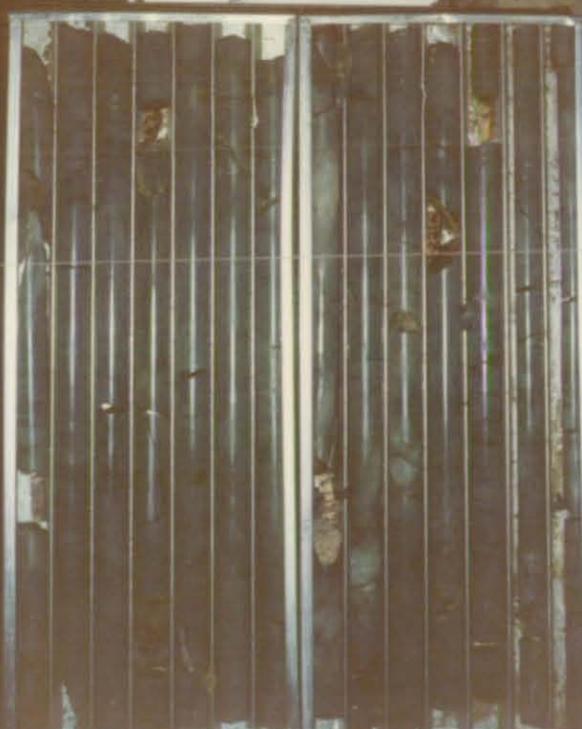
DDH BH<sub>200/1</sub>

199.05 — 211.33 m.



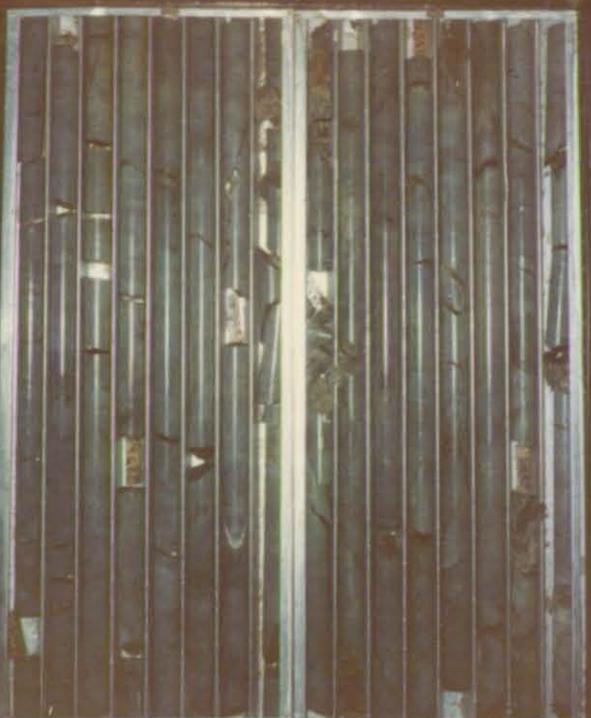
DDH BH<sub>200/1</sub>

211.33 — 223.92 m.



DDH BH 200/1

223.92 — 238.62 m.



DDH BH 200/1

238.62 — 253.45 m.



DDH BH 200/1

253.45 — 267.90 m.



DDH BH 200/1

267.90 — 281.42 m.



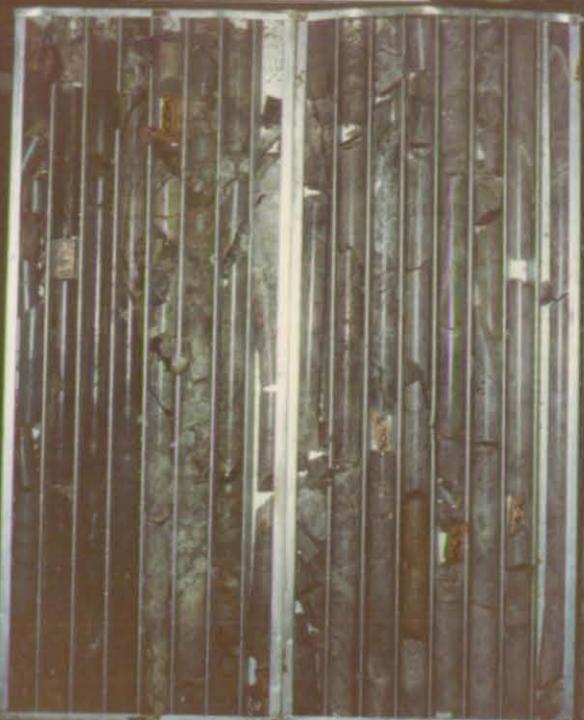
DDH BH 200/1

281.42 — 295.70 m.



DDH BH 200/1

295.70 — 309.70 m.



DDH BH 200/1

309.70 — 323.83 m.



DDH BH 200/1

323.83 — 337.66 m.



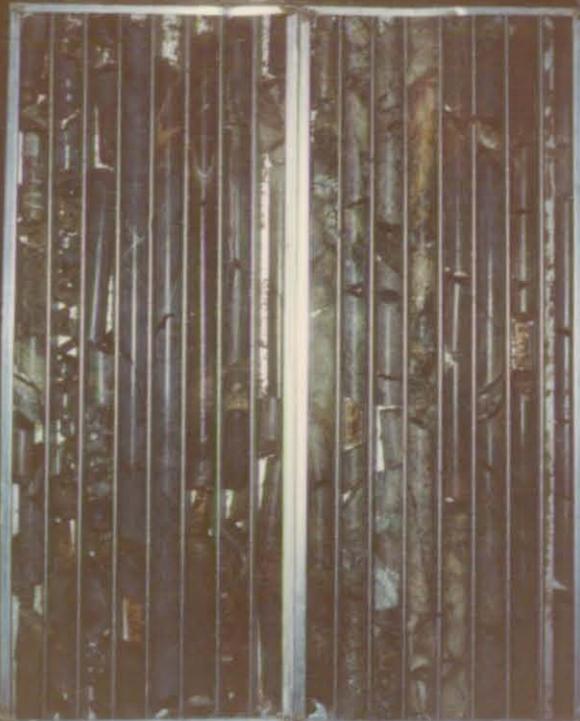
DDH BH 200/1

337.66 — 353.10 m.



DDH BH 200/1

353.10 — 368.10 m.



DDH BH 200/1

368.10 — 382.80 m.



GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. BH 150/1

**PLANNING**

Proposer: ... J. M. Clark ..... Depth: .....  
 Location: ... Bold Head .....  
 Purpose of Hole: Test for southern extension of body .....  
 Co-ords: ... 40325 ..... E ..... 10150 ..... N  
 Inclination: ... -90° .....  
 Bearing: ..... °Grid ..... °Mag  
 Target: ..... E ..... N  
 Depth: .....  
 Approved by: ..... Date: .....

**SURVEY**

Survey Co-ords: ..... E ..... N  
 Surveyed Bearing: ..... °Grid ..... °Mag  
 Surveyed in by: ..... Date .....  
 Actual Co-ords: ... 40325.0 ..... E ..... 10150.3 ..... N  
 R.L. of Collar: ... /119.8 ISC 220,319.5E 566,768.4 N  
 Inclination of Hole: ... -90 .....  
 Picked up By: ... B. Lennon ..... Date 6-10-78

**SUMMARY**

Logged By: ... J.M. Clark ..... Date .....  
 Results: ... Mine series rocks not intersected. ....  
 .....  
 .....

**DRILLING**

Date Commenced: ... 20-8-1978 ..... Date Terminated: 27-10-1978 .....  
 Driller/Contractor ... A.D.D. ....

Casing:	Size :	HQ	NQ	
	Depth :	51	177	
Core:	Size :	HQ	NQ	BQ
	Depth :	51	177	440

Wedge Runoff:  
 Wedge placed: ..... Depth  
 Proposed by: ..... Approved by  
 Reason: .....

Extension:  
 Final Depth: 440.0  
 Reason for Termination: In adamellite

Condition of hole on completion:  
 Casing: 15m BXTT, 15m NQ casing left down hole.  
 Cemented:  
 Bore hole survey: Single shot  
 Water:  
 Comments on Drilling Conditions: Good

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 150/1

Survey method: Singleshot Camera  
 Final depth: 440.0m  
 Casing depth: 130m NQ

Depth surveyed to: 440.0  
 Date surveyed :  
 Surveyed by: L. Denby  
 Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
69	-	-	0.0	- 90.0			
84	-	-			84.0		
99	-	-	0.0	- 90.0			
114	-	-			114.0		
129	-	-	0.0	- 90.0			
159	-	-			159.5		
190	53	25	0°30'	- 89.5			
223.5					223.5	0.34	0.45
257	310	282	1°0'	- 89.0			
291.5					291.49	1.10	-0.46
326	358	330	1°15'	- 88.75			
353					352.98	2.44	-0.51
380	319	291	2°45'	- 87.25			
410					409.91	4.50	-2.30
440	309	281	3°45'	- 86.25	439.85	5.73	-3.82

REMARKS:

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 150/1

12.0 - 292.90 m

UPPER VOLCANICS

Typically a fine grained green to greyish green basic volcanic. The unit has a variable texture - evenly fine grained, amygdaloidal, porphyritic, and agglomeritic.

12.0-32.5m fractures in core are coated with red iron-oxides. Rubbly core is present at 14.3-14.7m, 22.0-22.5m, 28.0-30.0m.

12.0-40.0m. Upper volcanics have rounded to sub-rounded dark green spots which could be amygdales.  
42.4-46.4m. Broken core with a shorter interval (42.5-44.4m) of rubble and recemented breccia.  
Fault Zone.

46.8-48.0m. Small white feldspar aggregates in otherwise uniform volcanics.

57.8-58.5m. Rubbly core with minor recemented breccia.

70.7-72.2m. Broken core.

101.7-102.4m. Broken core with recemented breccias.

106-120m. Spotted volcanics. Irregular spots, up to 5mm across, have a snowflake like texture. They appear to consist predominantly of pyrite, with some smaller dark green chlorite spots.

112.4-112.5m. Broken core.

121.9-122.4m. Light green pug zones up to 1cm wide through the core at 48° to core axis.

125.7-125.9m. Iron stained recemented breccia with light green pug zone at 30° to core axis.

125.9-127.35m. Broken core with short lengths of whole core.

127.35-166.3m. Greyish green upper volcanics which appears to have uniform texture, when looked at closely the unit is agglomeritic (127.35-148.0m), and or spotted (dark green chlorite).

159.8m. Light green sandy crush zone with some larger fragments at 30° to core axis.

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 150/1

166.3-166.6m. Crush zone containing rock fragments in a light green chloritic/clay matrix.

171.0 - 171.5 m Broken Core  
177.4 - 177.6 m Broken Core  
180.0 - 181.0 m Broken Core  
198.0 - 203.1 m Major zone of brecciated volcanics.

Rock fragments are set in a matrix of pinkish green to light grey clay and chlorite pug. The most intense crushing appears to be at 202.95m (at 38° to core axis).

229.4 - 230.1 m Broken Core  
244.8 - 249.0 m Minor broken core  
258.1 - 258.3 m Broken Core

Around 275.0 m volcanics have agglomeritic texture with minor spotting.

There is minor ironstaining along fractures at the base of this unit.

Fractures/m = AV 4  
Recovery = Good

292.90 - 294.80 m

UPPER SEDIMENTS

Grey to greyish green fine grained hornfelsic sediment. Either ends of this unit resemble marble, because of colour and veining, but calcite is not present. The middle of the unit has several fine white and pink quartz veins in it.

Both boundaries are sharp, the upper at 65° to the core axis and the lower 45°.

Minor ironstaining is present.

Fractures/m = 10  
Recovery = 100%

294.80 - 423.40 m

UPPER VOLCANICS

Green to greyish green, fine grained basic volcanics. The unit has varied textures, the most common being very dark green spots.

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 150/1

Volcanic agglomerates are also present.

294.8-298.0 m. Minor ironstaining and broken core.

320.8-320.9 m. Light pink very weathered aplite dyke. Minor broken core is present between 319.9-323.5 m.

344.0-346.3 m. Medium grained basic volcanic.

362.9-363.9 m. White to light grey sugary aplite dyke. The margins are at 30° to core axis. The lower boundary could be faulted, as clay filled fault zone appears to be present.

366.9-369.0 m. Core is severely ironstained, both along fractures and in spots. Minor broken core is present throughout and at 368.8-369.0 m there is a recemented breccia.

376.0-377.0 m. Minor broken core.

387.6-389.0 m. Badly broken core with abundant light green talc.

403.5-404.5 m. Minor ironstaining.

418.9-420.0 m. Minor broken core.

Fractures/M = 4  
Recovery = good

423.40 - 425.70 m

QUARTZITE

Grey to light brownish grey fine grained banded (90° to core axis) quartzite. White quartz veining is present, and towards the end of the unit, ironstaining along fractures becomes common.

The upper boundary is composed of broken core with a minor adamellite vein. The lower boundary is sharp against adamellite, with small aplite veins.

Fractures/M = 72°  
Recovery = 100%

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. BH 150/1

425.70 - 440.00 m

ADAMELLITE

Typical Bold Head adamellite consisting of coarse grained light pink orthoclase with finer grained quartz, plagioclase, biotite and hornblende.

The beginning of the unit (425.7 - 427.6 m) has minor ironstaining and is very crumbly in places.

Fractures/M = 3  
Recovery = 100%

EOH 440.0 m

Rick

On section 10150N please plot the

following points

	metres down hole	E	RL	
collar	<del>84m</del> <sup>0m</sup>	<del>40325.0</del>	1119.8m	0.34No/s
	84m	40325.0	1035.8 mV	
	114m	40325.0	1005.8 mV	
	159.5	40325.0	960.3mV ✓	
	223.5	40325.45	896.3mV ✓	
	291.5	40324.54	828.31 ✓	* 1.1mNo/s
	353.0	40324.49	766.82 ✓	
	410.0	40322.70	709.89 ✓	
	440.0	40321.18	679.95	* <del>5.0</del> No/s 6.0m

EOH 440.0m.



DIAMOND DRILL HOLE SURVEY

Eastman-Kodak SINGLE SHOT Camera

DDH No BH/1541

Casing Depth 67m HQ 130m NG

Surveyed by L. DENNY

Total Depth 440.00m

Depth Surveyed 440.00m

Date Surveyed 24-10-78

Depth	Drift Angle	Mean Drift Angle	Cos.		Vert. Depth	True Vert. Depth	Defl.	Drift Direc.	Mean Drift Direc.	Co-ords		Sum of Co-ords					
			Sine	Sine						N	E	N	E	W			
69m	0'	0'	0	1	69	69	0	0	0	0	0	0	0	0	0	0	
99m	0'	0'	0	1	70	99	0	0	0	0	0	0	0	0	0	0	
129m	0'15"	0'15"	0.9949	0.1736	30	129.73	13	90	W	N	W	4495	8829	0.06	0.11	0.06	0.11
190m	0'30"	0'30"	0.9877	0.1736	61	190.53	13	25	N	E	N	5299	8480	0.28	0.45	0.34	0.34
257m	1'	1'	0.9988	0.1736	66.99	256.99	1.17	78	N	W	N	6428	7660	0.75	0.90	1.09	0.56
326m	1'15"	1'15"	0.9998	0.2180	68.99	325.98	1.50	30	N	W	N	9994	0349	1.50	0.05	2.59	0.61
380m	2'45"	2'45"	0.9988	0.4860	53.94	379.92	2.59	69	N	W	N	7547	6561	1.95	1.70	4.54	2.31
440m	3'45"	3'45"	0.9979	0.6540	59.87	439.79	3.92	79	N	W	N	6293	7771	2.47	3.05	7.01	5.36

DDH BH 150/1

21.39 — 30.10 m.



DDH BH 150/1

30.10 — 37.60 m.



DDH BH 150/1

37.60 — 45.32 m.



DDH BH 150/1

45.32 — 53.36 m.



DDH BH 150/1

53.36 — 65.42 m.



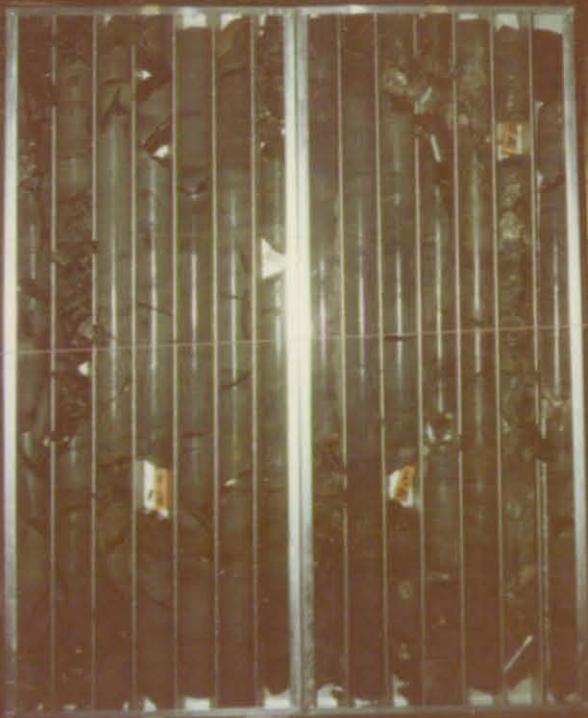
DDH BH 150/1

65.42 — 77.30 m.



DDH BH 150/1

77.30 — 90.02 m.



DDH BH 150/1

90.02 — 102.65 m.



DDH BH 150/1

380.70 — 395.0 m.



DDH BH 150/1

395.00 — 409.10 m.



DDH BH 150/1

409.10 — 423.30 m.



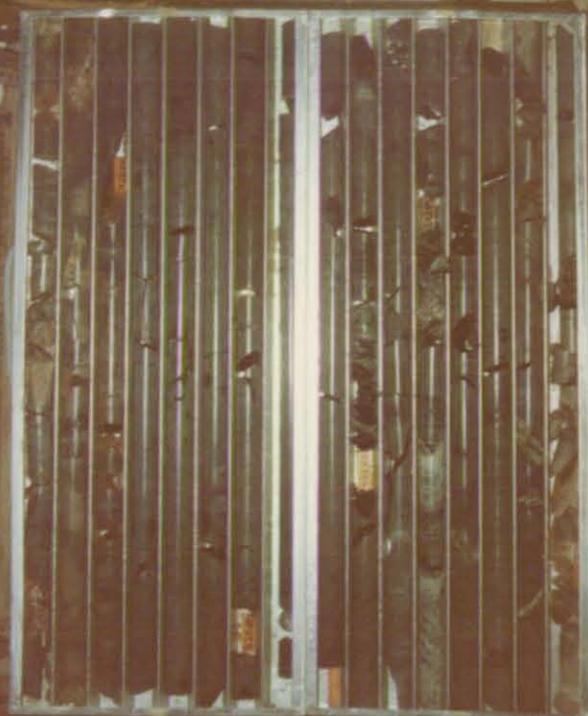
DDH BH 150/1

423.30 — 438.00 m.



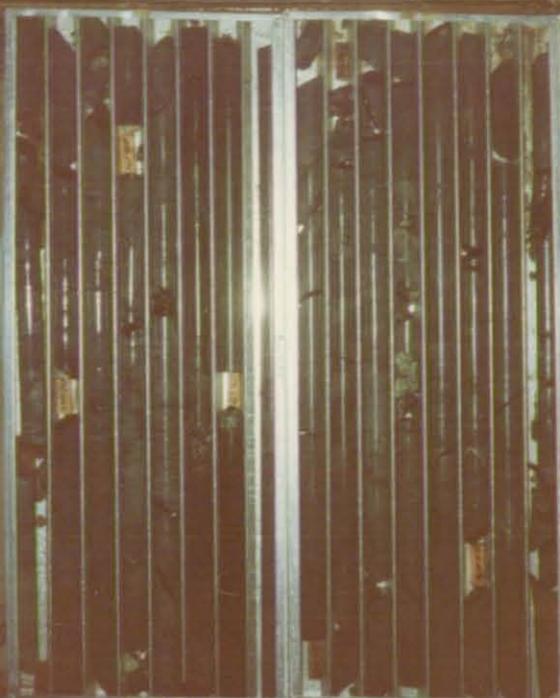
DDH BH 150/1

323.51 — 337.60 m.



DDH BH 150/1

337.60 — 351.75 m.



DDH BH 150/1

351.75 — 366.30 m.



DDH BH 150/1

366.30 — 380.70 m.



DDH BH 150/1

263.74 — 278.51 m.



DDH BH 150/1

278.51 — 293.13 m.



DDH BH 150/1

293.13 — 307.84 m.



DDH BH 150/1

307.84 — 323.51 m.



DDH BH 150/1

205.40—219.82m.



DDH BH 150/1

219.82—234.59 m.



DDH BH 150/1

234.59—249.16m.



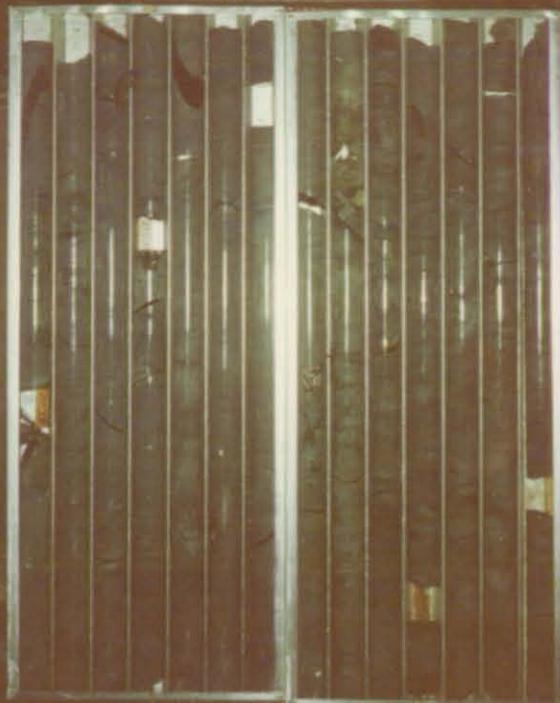
DDH BH 150/1

249.16—263.74 m.



DDH BH 150/1

151.64 — 164.64 m.



DDH BH 150/1

164.64 — 176.94 m.



DDH BH 150/1

176.94 — 190.61 m.



DDH BH 150/1

190.61 — 205.40 m.



DDH BH 150/1

102.65 → 114.80 m.



DDH BH 150/1

114.80 → 127.00 m.



DDH BH 150/1

127.00 → 139.19 m.



DDH BH 150/1

139.19 → 151.64 m.

