GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/30

PLANNING

PROPOSER: R.E.S. Davies DEPTH: 25 m

LOCATION: W58 -200 m S/D

PURPOSE OF HOLE: Test position of Decline Fault

PROPOSED CO-ORDS: 220 319 E 563 975 N

INCLINATION: +60°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 102° 25' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 309.4 E 563 978.9 N

R.L. OF COLLAR: 196.5

INCLINATION OF HOLE: +58° 45'

PICKED UP BY: R. Howman DATE: 12/2/81

SUMMARY

LOGGED BY: R.E.S. Davies

RESULTS: 0 - 15 m, 15 m @ 1.06% WO_3 Pgh Lower Wedge

DRILLING

DATE COMMENCED: 11/2/81 DATE TERMINATED: 26/2/81

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 27.6

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION: 27.6 m

FINAL DEPTH: Passed through D.F.

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/30

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 4.5	4.5	4.5	100
4.5 - 5.8	1.3	1.3	100
5.8 - 8.3	3.0	3.0	100
8.3 - 11.2	2.9	2.9	100
11.2 - 14.8	3.6	3.3	92
14.8 - 17.3	2.5	2.0	80
17.3 - 19.0	1.7	1.6	94
19.0 - 20.8	1.8	1.7	94
20.8 - 23.0	2.2	2.0	91
23.0 - 23.7	0.7	0.5	71
23.7 - 24.5	0.8	0.6	75
24.5 - 25.0	0.5	0.3	60
25.0 - 27.6	2.6	1.7	65
EOH 27.6 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/30

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A.O.C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.00 - 17.6	pgh	6-12		Chlor/cc			57	
17.6 - 22.0	bh	> 20		"			90	
22.0 - 26.3	D.F.Z.	> 20		"			7	
26.3 - 27.6	bh	> 20		"			94	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/30

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 13004	0	1	1.0	1.0	2.5			
05	1	2	"	"	0.21			
06	2	3	"	"	0.63			
07	3	4	"	"	0.85			
08	4	5	"	"	0.91			
09	5	6	"	"	0.40			
10	6	7	"	"	0.20			
11	7	8	"	"	0.38			
12	8	9	"	"	0.23			
13	9	10	"	"	6.4			
14	10	11	"	"	0.17			
15	11	12	"	"	3.7			
16	12	13	"	"	0.43			
17	13	14	"	"	0.16			
18	14	15	"	"	1.15			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/30

Summary

00.0 - 17.6 m Pyroxene Garnet Hornfels
17.6 - 22.0 m Biotite Hornfels
22.0 - 26.3 m Decline Fault Zone
26.3 - 27.6 m Biotite Hornfels

0.0 - 17.6 m **PYROXENE GARNET HORNFELS**

Typical well podded pyroxene garnet hornfels, mineralised throughout, a number of large scheelite crystals are present at 10 - 11 m.

Disseminated scheelite is sparsley present throughout the whole unit. The core is generally competant except for the interval from 12.5 to 17.6 m. This appears to be the hangingwall of the unit as it composition becomes richer in biotite hornfels. Only thin layers of pyroxene hornfels are present and no scheelite occurs in the last 3 m.

This section is heavily fractured, most pieces of core are from 2 - 5 cm long and although slickenslides are present on most surfaces and some gouge occurs, this zone is taken to be the hangingwall pyroxene garent hornfels contact rather than a fault. Principally due to the gradational nature of the change.

Bedding is @ 40° to LCA @ 16 m

Mineralisation stops at 15 m
In most areas the pyroxene garnet hornfels proper is criss crossed by many small hairline cracks which have not yet opened up.

17.6 - 22.0 **BIOTITE HORNFELS**

Fine grained mostly uniform biotite hornfels, some faintly pyroxene hornfels rich layers in the first few metres.

22.0 - 26.3 **DECLINE FAULT**

Typical badly fractured Decline Fault Zone with core size of around 2-3 cm.

A clay pug zone @ 23.5 m probably represents the centre of the fault.

The rock type is biotite hornfels and fault gouge.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/30

26.3 - 27.6 BIOTITE HORNFELS

Dominantly biotite hornfels but with small orientated blebs of pyroxene hornfels. The ground is fairly good, recovered core being in lengths of about 15 cm.

Bedding is @ 60° to LCA

No scheelite is present, and this unit is thought to be the biotite hornfels above B Lens.

EOH 27.6 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/29

PLANNING

PROPOSER: R. E. S. Davies DEPTH: 40 m

LOCATION: W58 -200 m S/D

PURPOSE OF HOLE: Define extent of brecciated volcanics east of the Decline Fault

PROPOSED CO-ORDS: 220 319 E 563 975 N

INCLINATION: 0°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 104° 31' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 318.0 E 563 975.0 N

R.L. OF COLLAR: -199.0

INCLINATION OF HOLE: -0° 26'

PICKED UP BY: R. Howman DATE: 10/2/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: 0 - 14 m, 14 m @ 1.15 WO_3 Pgh Lower Wedge

DRILLING

DATE COMMENCED: 3/2/81 DATE TERMINATED: 11/2/81

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH: 46TT

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 20 m

REASON FOR TERMINATION: Abandoned in Decline Fault

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/29

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.7	3.7	3.7	100
3.7 - 5.0	1.3	1.3	100
5.0 - 8.2	3.2	3.2	100
8.2 - 11.2	3.0	3.0	100
11.2 - 14.0	3.0	3.0	100
14.0 - 16.0	2.0	1.9	95
16.0 - 18.2	2.2	1.5	68
18.2 - 19.2	1.0	0.3	30
19.2 - 20.0	0.8	0.02	0.06

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/29

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0 - 1	14		
1 - 2	17		
2 - 3	60		
3 - 4	75		
4 - 5	83		
5 - 6	95		
6 - 7	68		
7 - 8	86		
8 - 9	90		
9 - 10	92		
10 - 11	100		
11 - 12	90		
12 - 13	100		
13 - 14	20		
14 - 15	37		
15 - 16	26		
16 - 17	0		
17 - 18	00		
18 - 19	0		
19 - 20	0		
20 -			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/29

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12990	0	1	1.0	1.0	0.25			
91	1	2	"	"	1.04			
92	2	3	"	"	0.18			
93	3	4	"	"	0.65			
94	4	5	"	"	0.13			
95	5	6	"	"	2.3			
96	6	7	"	"	0.13			
97	7	8	"	"	0.24			
98	8	9	"	"	3.4			
99	9	10	"	"	1.16			
13000	10	11	"	"	7.5			
1	11	12	"	"	0.01			
2	12	13	"	"	1.9			
3	13	14	"	"	0.75			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/29

Summary

0.0 - 13.6 m	pgh (m)
13.6 - 16.5	bh
16.5 - 20.0	D.F.

0.0 - 13.6 m PYROXENE GARNET HORNFELS (MINERALISATION)

Typical pyroxene garnet hornfels, it is mineralised throughout, probably to an average grade of about 0.6%.

The core is slightly fractured at 0.75 m and 1.5 m indicating small faults.

Although the upper contact is slightly fractured it does not appear to be faulted.

13.6 - 16.5 BIOTITE HORNFELS

The initial 60 cm is fractured and was recovered in fragments from 5 - 15 cm long. The central section is massive although fairly well cut by cracks especially from 15.7 - 16.0 m.

16.5 - 20.0 FAULT ZONE

The hole had to be abandoned in this material due to clays grabbing the drill rods when water was applied. This indicates that two fault zones are present. Firstly the Decline Fault which was penetrated, then immediately followed by the Fulmar Fault. This is known to contain clays.

In the core is is not possible to seperate the two faults. Most of the recovered material is angular or sub-angular fragments about 1 cm diameter which have chlorite on most surfaces.

EOH 20.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/28

PLANNING

PROPOSER: R. H. Davies DEPTH: 33 m

LOCATION: W58 -200 m Level

PURPOSE OF HOLE: Test Decline Fault

PROPOSED CO-ORDS: 220 311 E 563 978 N

INCLINATION: 0°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 105° 25' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 311.1 E 563 977.4 N

R.L. OF COLLAR: -199.2

INCLINATION OF HOLE: +2° 06'

PICKED UP BY: J. Cook DATE: 22/8/80

SUMMARY

LOGGED BY: R. H. Davies

RESULTS: 0- 7 m, 7 m @ 1.19% WO_3
13-20 m, 7 m @ 1.27% WO_3 } pgh (m) Lower Wedge

DRILLING

DATE COMMENCED: 21/8/80 DATE TERMINATED: 25/8/80

DRILLER/CONTRACTOR: A.D.D./S. Batchelor

CASING: SIZE:
DEPTH:

CORE: SIZE: NQ 46TT
DEPTH: 24 26.3

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 26.3 m

REASON FOR TERMINATION: Abandoned in Fault

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER: No

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/28

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.6	3.6	3.6	100
3.6 - 5.8	2.2	2.1	95
5.8 - 8.8	3.0	3.0	100
8.8 - 11.8	3.0	2.9	97
11.8 - 14.4	2.6	2.6	100
14.4 - 17.4	3.0	3.0	100
17.4 - 20.4	3.0	3.0	100
20.4 - 21.7	1.3	1.3	100
21.7 - 23.6	1.9	1.35	71
23.6 - 24.0	0.6	0.2	30
24.0 - 25.0	1.0	0.25	25
25.0 - 26.3	1.3	0.07	5
EOH 26.3 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/28

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0 m	74		
1.0 - 2.0	94		
2.0 - 3.0	95		
3.0 - 4.0	86		
4.0 - 5.0	98		
5.0 - 6.0	84		
6.0 - 7.0	100		
7.0 - 8.0	77		
8.0 - 9.0	74		
9.0 - 10.0	88		
10.0 - 11.0	96		
11.0 - 12.0	63		
12.0 - 13.0	95		
13.0 - 14.0	88		
14.0 - 15.0	81		
15.0 - 16.0	100		
16.0 - 17.0	100		
17.0 - 18.0	100		
18.0 - 19.0	100		
19.0 - 20.0	83		
20.0 - 21.0	62		
21.0 - 22.0	48		
22.0 - 23.0	20		
23.0 - 24.0	0		
24.0 - 25.0	0		
25.0 - 26.3	0		
EOH 26.3 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/28

DEPTH INTERVAL (METRES)	ROCK TYPE	FRACTURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T./ L.A.O.C.)	% CORE RECOVERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 20.0 m	pgh	5		Clay/chl		100	95	Fractured, disturbed and weathered from 19.0 to 20.0m
20.0 - 22.57	bh	9		Chl		80	40	Cleavage? at 21.8
22.57 - 23.6	DFZ	> 20		Clay		30	0	
23.6 - 26.3	ph Δ	> 20		Pyrite/chl	35	5	0	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/28

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12880	0	1	1.0	1.0	1.04			
81	1	2	"	"	3.6			
82	2	3	"	"	0.45			
83	3	4	"	"	0.80			
84	4	5	"	"	0.97			
85	5	6	"	"	0.93			
86	6	7	"	"	0.54			
87	7	8	"	"	0.17			
88	8	9	"	"	0.10			
89	9	10	"	"	0.43			
90	10	11	"	"	0.77			
91	11	12	"	"	0.29			
92	12	13	"	"	0.27			
93	13	14	"	"	0.62			
94	14	15	"	"	3.3			
95	15	16	"	"	1.00			
96	16	17	"	"	1.66			
97	17	18	"	"	0.08			
98	18	19	"	"	1.64			
99	19	20	"	"	0.62			
900	20	21	"	"	0.03			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/28

0.0 - 20.0 m PYROXENE GARNET HORNFELS

This unit consists of a typical pyroxene garnet hornfels.

A pale olive green sporadically mineralised rock containing large calcite ovoids rimmed by pyroxene and garnet in a matrix of actinolite.

Joints 1 m 10°
2 m 45°
7 m 20°
8 m 60°
11 m 70°

The pyroxene garnet hornfels near the contact with biotite hornfels appears to be disturbed and may be faulted.

20.0 - 22.57 BIOTITE HORNFELS

This zone contains a dark brown fairly massive biotite hornfels.

Adjacent to the pyroxene garnet hornfels contact the unit appears to be disturbed and weathered.

Between 20.4 and 22.0 m the biotite hornfels contains a well defined fabric which may be a cleavage, or perhaps bedding? In this zone small elongate K spar crystals may be observed. Elongate in direction of fabric.

Cleavage(?) 35° at 21.5 m

Minor pyroxene veinlets cut the biotite hornfels.

22.57 - 23.6 DECLINE FAULT ZONE

This zone consists of relatively small (25 cm) fragments of biotite hornfels set in a matrix of chlorite and clay.

23.6 - 26.3 PYROXENE HORNFELS (FRACTURED)

This unit consists of a pale olive green pyroxene hornfels. The unit is extensively fractured with no pieces of core >10 cm

Some banding (bedding?) is observable at 25.0 m The rock contains minor pyrite and biotite hornfels.

This unit probably is still part of the Decline Fault Zone.

The pyroxene hornfels unit could possibly be the pyroxene hornfels above B Lens.

Bedding 26.2 m 35°

EOH 26.3 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/27

PLANNING

PROPOSER: R. H. Davies **DEPTH:** 55 m

LOCATION: W74 -200 m R.L. Strike Drive

PURPOSE OF HOLE: Test D.F.Z. and B Lens

PROPOSED CO-ORDS: 220 323 E 564 091 N

INCLINATION: 0°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: **DATE:**

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 103° 16' °GRID °MAG
101° 47'

SURVEYED IN BY: **DATE:**

ACTUAL CO-ORDS: 564 091.7 N 220 323.7 E
564 091.8 220 323.7

R.L. OF COLLAR: -201.5
-201.4

INCLINATION OF HOLE: -0° 33'
+0° 19'

) Top figure for second hole,

PICKED UP BY: R. Howman **DATE:** 29/8/80
J. Cook 21/8/80

SUMMARY

LOGGED BY: R. H. Davies

RESULTS: 28 - 31 m, 3 m @ 0.39% WO_3
40 - 46 m, 6 m @ 1.18% WO_3 B Lens Decline

DRILLING

DATE COMMENCED: 18/8/80 **DATE TERMINATED:** 28/8/80

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: **SIZE:**
DEPTH:

CORE: **SIZE:** 56TT 46TT
DEPTH: 0-12.2 12.2-49.3

WEDGE PLACED: **DEPTH:** **PROPOSER:**

EXTENSION:

FINAL DEPTH: 49.3 m

REASON FOR TERMINATION: Pass through B Lens into fault (Grassy River Fault) and abandonded

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot

WATER:

COMMENTS ON DRILLING CONDITIONS: Hole was redrilled due to failure of drill gear in first hole.

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/27

Surveyed method: Multishot
Final depth: 49.3 m
Casing depth: 12 m

Depth surveyed to: 49.3 m
Date surveyed: 28/8/80
Surveyed by: R. Drake
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	E
15 m	105°	95°	89°	1°	0,26	1.31	14.94
30 m	105°	95°	89°	1°	0.52	2.61	29.88
49.3	105°	95°	89°	1°	0,86	4,30	49,10

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/27

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 1.20	1.30	1.00	83
1.20 - 3.00	1.80	2.10	117
3.00 - 4.00	1.00	1.00	100
4.00 - 6.10	2.10	2.10	100
6.10 - 7.50	1.40	1.60	114
7.50 - 9.00	1.50	1.50	100
9.00 - 11.36	2.30	2.30	100
11.36 - 11.50	0.20	0.20	100
11.50 - 12.20	0.70	0.70	100
12.20 - 13.40	1.20	1.10	92
13.40 - 14.80	1.40	1.37	98
14.80 - 16.70	1.90	1.50	79
16.70 - 18.00	1.30	1.10	85
18.00 - 20.30	2.30	2.20	96
20.30 - 21.60	1.30	1.30	100
21.60 - 23.60	2.00	2.20	110
23.60 - 25.80	2.20	2.20	100
25.80 - 27.00	1.20	1.20	100
27.00 - 30.80	3.80	3.80	100
30.80 - 33.80	3.00	2.80	100
33.80 - 36.80	3.00	3.00	100
36.80 - 38.72	1.82	1.82	100
38.72 - 40.00	1.28	1.28	100
40.00 - 43.00	3.00	3.00	100
43.00 - 44.50	1.50	1.45	97
44.50 - 47.60	3.10	3.10	100
47.60 - 49.30	1.70	0.99	58
EOH 49.30 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/27

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.00 - 1.00	22		
1.00 - 2.00	74		
2.00 - 3.00	41		
3.00 - 4.00	48		
4.00 - 5.00	74		
5.00 - 6.00	69		
6.00 - 7.00	50		
7.00 - 8.00	83		
8.00 - 9.00	26		
9.00 - 10.00	56		
10.00 - 11.00	0		
11.00 - 12.00	16		
12.00 - 13.00	21		
13.00 - 14.00	10		
14.00 - 15.00	0		
15.00 - 16.00	16		
16.00 - 17.00	0		
17.00 - 18.00	0		
18.00 - 19.00	0		
19.00 - 20.00	27		
20.00 - 21.00	40		
21.00 - 22.00	39		
22.00 - 23.00	0		
23.00 - 24.00	52		
24.00 - 25.00	83		
25.00 - 26.00	65		
26.00 - 27.00	41		
27.00 - 28.00	11		
28.00 - 29.00	83		
29.00 - 30.00	50		
30.00 - 31.00	69		
31.00 - 32.00	74		
32.00 - 33.00	72		
33.00 - 34.00	54		
34.00 - 35.00	56		
35.00 - 36.00	82		
36.00 - 37.00	88		
37.00 - 38.00	100		
38.00 - 39.00	84		
39.00 - 40.00	53		
40.00 - 41.00	93		
41.00 - 42.00	78		
42.00 - 43.00	92		
43.00 - 44.00	98		
44.00 - 45.00	96		
45.00 - 46.00	61		
46.00 - 47.00	53		
47.00 - 48.00	0		
48.00 - 49.00	0		

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/27

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T./ L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.00 - 2.85 m	pgh	7		Calcite/pyrite		100	46	
2.85 - 10.00	bh	11	54° 64° 70°	Calcite/chlorite		100	58	
10.00 - 11.50	DFZ	20	-	Clay		100	0	Extremely brecciated rock with clay pug.
11.50 - 28.30	bph	15	30° 48° 60°	Chlorite/calcite	48° 58° 45° 80°	97	25	
28.30 - 46.00	B Lens	5	90° 36° 22° 60°	Chlorite/calcite	35°	99	74	Open vughs in ch bands.
46.00 - 47.00	pbh					100		
47.00 - 49.30	FZ	20				58	61 17	Extensively fractured core with clay pug.
EOH 49.30 m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/27

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12901	0	1	1.0	1.0	0.14			
02	1	2	"	"	0.07			
03	2	3	"	"	0.04			
04	28	29	"	"	0.49			
05	29	30	"	"	0.33			
06	30	31	"	"	0.35			
07	31	32	"	"	0.05			
08	32	33	"	"	0.16			
09	33	34	"	"	0.29			
10	34	35	"	"	0.19			
11	35	36	"	"	0.01			
12	36	37	"	"	0.01			
13	37	38	"	"	0.01			
14	38	39	"	"	0.01			
15	39	40	"	"	0.01			
16	40	41	"	"	0.86			
17	41	42	"	"	0.40			
18	42	43	"	"	0.54			
19	43	44	"	"	0.52			
20	44	45	"	"	0.74			
21	45	46	"	"	5.4			
22	46	47	"	"	0.20			

SPECIFIC GRAVITY

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

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/27

0.00 - 2.85 m PYROXENE GARNET HORNFELS

This unit consists of typical pyroxene garnet hornfels. With large calcite ovoids rimmed by grossular garnet and set in a pale green matrix of pyroxene.

The unit is poorly mineralised (scattered crystals of scheelite).

Between 1.2 and 1.6 m the core appears disturbed and contains numerous veinlets filled with amphibole.

2.85 - 10.00 BIOTITE HORNFELS

This unit consists of a fairly massive biotite hornfels which contains minor pyroxene hornfels bands.

The core in this unit contains numerous large (0.8 cm) ovoids. These appears to be composed of knobs of quartzite feldspar and biotite.

The unit is well jointed.

Joints	3.00 m	54°
	4.00 m	64°
	6.50 m	Sub parallel
	9.00 m	70°

The number of Joints/m increase adjacent to the Decline Fault Zone.

10.00 - 11.50 DECLINE FAULT ZONE

This zone consists of angular fragments of biotite hornfels set in a dark matrix of clay and chlorite.

At 11 m the core consists of biotite hornfels which has an extensive network of veins filled with calcite and pyrite.

NB: The width of the fault zone could possibly be extended from 10.00 - 19.00 m. Since the core between 11.50 - 19.00 is extensively broken.

11.50 - 28.30 BIOTITE PYROXENE HORNFELS

This unit consists of a grey brown biotite hornfels which becomes progressively richer in pyroxene to become a pyroxene hornfels at the top of the unit.

The unit is well jointed between 11.50 - 14.50 m

Between 14.50 - 19.00 m the core is extensively fractured with numerous pug zones.

Further fractured core exists between 26.3 m and 28.3 m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/27

At the contact with B Lens at 28.3 m the unit is brecciated and appears to be faulted.

Joints	12.0	30° & 60°
	13.0	48°
	15.0	60°
	19.5	58°
	26.8	15°
Faults	14.6 - 14.8	
	15.5 - 15.7	
	16.0 - 16.7	
	18.0	
	18.8	
	28.0	
Bedding	13.0 m	48°
	19.5 m	58°
	19.8	45°
	26.4	80°

28.3 - 46.0 B LENS

This unit consists of a sequence of bedded grey barren marbles and mineralised bands of olive green garnet pyroxene hornfels.

The unit appears to be generally quite competent. Although some of the marble unit contains large open cracks which may act as water channels.

Joints	28.5	90°
	31.8	36°
	35.5	22°
	42.0	60°
Bedding	35°	37.5 m

28.30 - 29.00	Garnet Pyroxene Hornfels
29.00 - 29.60	Pyroxene Hornfels
29.60 - 31.10	Garnet Pyroxene Hornfels
31.10 - 32.50	Marble
32.50 - 34.50	Garnet Pyroxene Hornfels
34.50 - 39.90	Marble
39.90 - 46.00	Garnet Pyroxene Hornfels

46.0 - 47.0 PYROXENE BIOTITE HORNFELS

This unit consists of an olive green rock composed of pyroxene and minor garnet in a matrix of amphibole and biotite.
The unit contains minor flecks of blue flouresc ing scheelite.

Minor calcite and pyroxene veins intersect the core.

The unit appears to be highly disturbed

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/27

47.00 - 49.30 m FAULT ZONE

This core consists of a dark green black rock which has been extensively fractured, Much of this zone consists of a dark green pug.

The rock appears to be composed of talc or similar fibrous mineral with minor biotite and is very soft.

At 47.2 m the core has a soapy feel and is soft (softer than a fingernail).

EOH 49.3 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/26

PLANNING

PROPOSER: R. E. Sandell Davies DEPTH: 45 m

LOCATION: W66 200 Strike Drive

PURPOSE OF HOLE: Test Decline Fault Zone & B Lens

PROPOSED CO-ORDS: 220 323 E 564 033 N

INCLINATION: 0°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 102° 35' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 324.1 E 564 033.8 N

R.L. OF COLLAR: -201.0

INCLINATION OF HOLE: +00° 43'

PICKED UP BY: M. Marchant DATE: 24/5/80

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS:
1 - 4 m, 3 m @ 1.99% WO_3 pgh
18 - 21 m, 3 m @ 0.83% WO_3 B Lens
23 - 25 m, 2 m @ 1.66% WO_3 B Lens
30 - 41 m, 11m @ 0.66% WO_3 B Lens

DRILLING

DATE COMMENCED: 22/5/80 DATE TERMINATED: 29/5/80

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: NQ
DEPTH:

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 52.4 m

REASON FOR TERMINATION: Passed through B Lens

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED: No

BORE HOLE SURVEY: Multishot

WATER: Yes Slightly saline "Refer Rock Mechanics"

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/26

Surveyed method: Multishot
Final depth: 52.4 m
Casing depth: Nil

Depth surveyed to: 52 m
Date surveyed: 29.5.80
Surveyed by: B. Schneiders
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			
4	103° 30'	93° 30'	91°	+1			
16	104°	94°	91°	+1			
28	103° 30'	93° 30'	90°	+1			
40	103°	93°	91°	+1			
52.4	103° 30'	93° 30'	91°	+1			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/26

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.0	1.0	0.7	70
1.0 - 2.5	1.5	1.4	93
2.5 - 5.3	2.8	2.8	100
5.3 - 6.3	1.0	0.8	80
6.3 - 7.1	0.8	0.4	50
7.1 - 8.0	0.9	0.4	44
8.0 - 8.5	0.5	0.3	60
8.5 - 9.2	0.7	0.3	43
9.2 - 9.8	0.6	0.6	100
9.8 - 10.3	0.5	0.3	60
10.3 - 11.4	1.1	0.8	73
11.4 - 12.0	0.6	0.2	30
12.0 - 13.5	1.5	0.4	27
13.5 - 14.0	0.5	0.4	90
14.0 - 15.2	1.2	0.5	42
15.2 - 15.9	0.7	0.6	86
15.9 - 18.0	2.1	1.9	90
18.0 - 21.0	3.0	3.0	100
21.0 - 24.0	3.0	3.0	100
24.0 - 27.0	3.0	3.0	100
27.0 - 30.0	3.0	3.0	100
30.0 - 33.0	3.0	3.0	100
33.0 - 36.0	3.0	3.0	100
36.0 - 39.0	3.0	3.0	100
39.0 - 41.0	2.0	1.9	95
41.0 - 41.6	0.6	0.5	83
41.6 - 43.0	1.4	1.4	100
43.0 - 43.5	0.5	0.5	100
43.5 - 44.5	1.0	1.0	100
44.5 - 45.5	1.0	1.0	100
45.5 - 47.0	2.0	1.5	75
47.0 - 49.0	2.0	1.5	75
49.0 - 49.1	0.1	0.05	50
49.1 - 47.2	0.1	0.05	50
47.2 - 49.7	0.5	0.2	40
49.7 - 49.9	0.2	0.2	100
49.9 - 50.1	0.2	0.1	50
50.1 - 50.4	0.3	0.2	66
50.4 - 50.8	0.4	0.3	75
50.4 - 51.2	0.4	0.3	75
51.2 - 51.5	0.3	0.1	33
51.5 - 52.4	0.9	0.7	78
EOH 52.4 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D320/26

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0	0		
1.0 - 2.0	50		
2.0 - 3.0	45		
3.0 - 4.0	40		
4.0 - 5.0	30		
5.0 - 6.0	20		
6.0 - 7.0	15		
7.0 - 8.0	0		
8.0 - 9.0	0		
9.0 - 10.0	48		
10.0 - 11.0	56		
11.0 - 12.0	0		
12.0 - 13.0	0		
13.0 - 14.0	71		
14.0 - 15.0	14		
15.0 - 16.0	43		
16.0 - 17.0	20		
17.0 - 18.0	80		
18.0 - 19.0	40		
19.0 - 20.0	60		
20.0 - 21.0	70		
21.0 - 22.0	80		
22.0 - 23.0	40		
23.0 - 24.0	47		
24.0 - 25.0	58		
25.0 - 26.0	50		
26.0 - 27.0	47		
27.0 - 28.0	25		
28.0 - 29.0	25		
29.0 - 30.0	30		
30.0 - 31.0	40		
31.0 - 32.0	40		
32.0 - 33.0	20		
33.0 - 34.0	60		
34.0 - 35.0	70		
35.0 - 36.0	60		
36.0 - 37.0	40		
37.0 - 38.0	70		
38.0 - 39.0	57		
39.0 - 40.0	0		
40.0 - 41.0	0		
41.0 - 42.0	10		
42.0 - 43.0	10		
43.0 - 44.0	10		
44.0 - 45.0	10		
45.0 - 46.0	10		
46.0 - 47.0	10		
47.0 - 48.0	54		
48.0 - 49.0	10		
49.0 - 50.0	17		
50.0 - 51.0	24		
51.0 - 52.0	10		
52.0 - 52.4	0		

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/26

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A.O.C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 5.4	pgh	4-6		cc/chlor			83	
5.4 - 9.5	DFZ	>20		gouge/clay/cc			6	
9.5 - 16.8	bph	15-20		chlor			25	
16.8 - 47.0	B Lens	3-9		cc/clay			86	
47.0 - 52.4	B Lens	>20		chlor/sulph			15	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/26

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12253	0	1	1.0	1.0	<0.01	<0.01		
54	1	2	"	"	0.76	0.04		
55	2	3	"	"	6.4	0.13		
56	3	4	"	"	1.21	0.02		
57	4	5	"	"	<0.01	0.01		
58	16	17	"	"	<0.01	0.01		
59	17	18	"	"	0.14	<0.01		
60	18	19	"	"	1.67	0.05		
61	19	20	"	"	0.52	0.02		
62	20	21	"	"	0.31	0.01		
63	21	22	"	"	0.21	0.01		
64	22	23	"	"	0.04	<0.01		
65	23	24	"	"	0.45	0.01		
66	24	25	"	"	0.45	0.01		
67	25	26	"	"	0.18	<0.01		
68	26	27	"	"	<0.01	<0.01		
69	27	28	"	"	<0.01	<0.01		
70	28	29	"	"	<0.01	<0.01		
71	29	30	"	"	0.04	0.01		
72	30	31	"	"	1.27	0.04		
73	31	32	"	"	2.05	0.07		
74	32	33	"	"	0.23	<0.01		
75	33	34	"	"	0.10	0.01		
76	34	35	"	"	0.30	0.01		
77	35	36	"	"	0.84	0.02		
78	36	37	"	"	0.59	0.01		
79	37	38	"	"	0.48	0.01		
80	38	39	"	"	0.98	0.03		
81	39	40	"	"	<0.01	0.01		
82	40	41	"	"	0.43	0.01		
83	41	42	"	"	<0.01	<0.01		
84	42	43	"	"	<0.01	<0.01		
85	43	44	"	"	<0.01	<0.01		
86	44	45	"	"	<0.01	<0.01		
87	45	46	"	"	<0.01	<0.01		
88	46	47	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/26

0.0 - 5.4 m PYROXENE GARNET HORNFELS

Typical green and pale orange coloured pyroxene garnet hornfels. Patchy mineralisation, mostly in veins is present to 4.3 m, beyond that the unit is barren, consisting almost entirly of biotite hornfels with thin crosscutting pyroxene hornfels veins.

?Bedding is @ 36° to LCA @ 3.5 m

5.4 - 9.5 m DECLINE FAULT ZONE

This fault zone is marked by poor core recovery and the core being totally fractured and mostly broken into fragments of 1-5 cm in size. The lithology is pyroxene garnet hornfels throughout.

The pughy "heart" of the core, is present from 5.4 - 6.2 m and consists of gouge and clay bound together.

9.5 - 16.8 m BIOTITE PYROXENE HORNFELS

Although not strictly a part of the D.F.Z. this rock unit is badly broken in places and for mining purposes may be regarded as part of the fault zone.

It is initially dark grey/brown in colour with occasional green pyroxene interbeds. These beds become more prevalent down the core, notably from 13.3 m on. Where they form approximately 40% of the core.

Badly fractured core is present from 11.2 - 13.1 m, 13.8 - 15.1 m

Bedding	is @	54°	to LCA @ 9.8 m
		66°	13.4 m
		57°	15.8 m

16.8 - 52.4 B LENS

B Lens here consists of a number of differing rock types:

16.8 - 22.0 m	Garnet pyroxene hornfels. Fairly well mineralised and showing some bedding.
22.0 - 23.2 m	Fresh, grey bedded marble.
23.2 - 26.0 m	Massive garnet skarn. Well mineralised.
26.0 - 28.8 m	Mostly fresh grey marble, but some pyroxene hornfels alteration from 27 m on.
28.8 - 38.0 m	Massive garnet skarn well mineralised, except for marble from 32.5 - 33.5 m This marble has been brecciated and then rehealed.
38.0 - 48.5 m	Pyroxene hornfels, with occasional beds of mineralised garnet hornfels. Fractured and crushed rock, with clay pug. Filling is present from 40 - 41.5 m
48.5 - 52.4 m	Badly broken core, mostly recovered as fragments of 1-3 cm size, the lithology changes to dominant biotite hornfels at about 51.2 m indicating the hangingwall.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/26

Bedding is @	44°	to LCA @	19.3 m
	40°		23.0 m
	45°		27.0 m
	45°		29.3 m
	38°		35.0 m
	64°		38.2 m
	35°		42.0 m
	46°		45.6 m
	60°		50.3 m

EOH 52.4 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/25

PLANNING

PROPOSER: R. E. Sandell Davies DEPTH: 40 m

LOCATION: 200 Strike Drive W60 X Cut

PURPOSE OF HOLE: Test Decline Fault Zone

PROPOSED CO-ORDS: 220 314 E 563 992 N

INCLINATION: 0

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: T. Potter DATE: 14/5/80

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 102° 12' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 314.4 E 563 992.7 N

R.L. OF COLLAR: -199.6

INCLINATION OF HOLE: +00° 21'

PICKED UP BY: M. Marchant DATE: 25/5/80

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS: 9 - 14 m, 5 m @ 1.62 WO_3 @ 0.04 Mo pgh
27 - 30 m, 3 m @ 0.48 WO_3 B Lens

DRILLING

DATE COMMENCED: 15.5.80 DATE TERMINATED: 20.5.80

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE: -
DEPTH:

CORE: SIZE: NQ
DEPTH: 33.5

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 33.5 m

REASON FOR TERMINATION: Passed through B Lens

CONDITION OF HOLE ON COMPLETION: Open

CASING: Nil

CEMENTED: Nil

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/25

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.6 m	2.6	2.5	96
2.6 - 6.2	3.6	3.6	100
6.2 - 9.0	2.8	2.8	100
9.0 - 12.0	3.0	3.0	100
12.0 - 14.5	2.5	2.5	100
14.5 - 15.5	1.0	1.0	100
15.5 - 17.8	2.3	2.3	100
17.8 - 19.9	2.1	2.1	100
19.9 - 21.5	1.6	1.1	69
21.5 - 23.0	1.5	0.7	47
23.0 - 24.5	1.5	1.2	80
24.5 - 25.0	0.5	0.3	60
25.0 - 26.4	1.5	1.4	93
26.5 - 29.5	3.0	3.0	100
29.5 - 30.8	1.3	1.0	77
30.8 - 31.3	0.5	0.2	40
31.3 - 31.5	0.2	0.15	75
31.5 - 31.7	0.2	1.0	50
31.7 - 32.3	0.6	0.4	67
32.3 - 32.6	0.3	0.1	33
32.6 - 33.5	0.9	0.2	22
EOH 33.5 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/25

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0	0		
1.0 - 2.0	30		
2.0 - 3.0	10		
3.0 - 4.0	36		
4.0 - 5.0	20		
5.0 - 6.0	20		
6.0 - 7.0	20		
7.0 - 8.0	30		
8.0 - 9.0	37		
9.0 - 10.0	40		
10.0 - 11.0	10		
11.0 - 12.0	30		
12.0 - 13.0	30		
13.0 - 14.0	50		
14.0 - 15.0	40		
15.0 - 16.0	20		
16.0 - 17.0	83		
17.0 - 18.0	70		
18.0 - 19.0	50		
19.0 - 20.0	80		
20.0 - 21.0	10		
21.0 - 22.0	0		
22.0 - 23.0	0		
23.0 - 24.0	0		
24.0 - 25.0	60		
25.0 - 26.0	20		
26.0 - 27.0	70		
27.0 - 28.0	50		
28.0 - 29.0	64		
29.0 - 30.0	60		
30.0 - 31.0	20		
31.0 - 32.0	20		
32.0 - 33.0	20		
33.0 - 33.5	0		

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D320/25

DEPTH INTERVAL (METRES)	ROCK TYPE	FRACTURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T./ L.A.O.C.)	% CORE RECOVERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 19.5	pgh	6-8		Chlor/cc			82	
19.5 - 32.1	D.F.Z.	20		Gauge/chlor			8	
23.1 - 30.7	B Lens	3-8		cc/Chlor			82	
30.7 - 33.5	Volc	20		Chlor/clay			7	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/25

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12229	0	1	1.0	1.0	0.66	0.01		
30	1	2	"	"	0.27	<0.01		
31	2	3	"	"	<0.01	0.01		
32	3	4	"	"	0.16	<0.01		
33	4	5	"	"	0.19	<0.01		
34	5	6	"	"	<0.01	<0.01		
35	6	7	"	"	<0.01	<0.01		
36	7	8	"	"	0.06	<0.01		
37	8	9	"	"	0.03	<0.01		
38	9	10	"	"	0.70	0.02		
39	10	11	"	"	0.04	0.01		
40	11	12	"	"	5.6	0.11		
41	12	13	"	"	1.79	0.03		
42	13	14	"	"	1.57	0.03		
43	14	15	"	"	0.17	<0.01		
44	15	16	"	"	<0.01	<0.01		
45	23	24	"	"	0.25	<0.01		
46	24	25	"	"	0.96	0.02		
47	25	26	"	"	0.04	<0.01		
48	26	27	"	"	0.26	<0.01		
49	27	28	"	"	0.48	<0.01		
50	28	29	"	"	0.40	<0.01		
51	29	30	"	"	0.56	<0.01		
52	30	31	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/25

0.0 - 19.5 m PYROXENE - GARNET HORNFELS

Typical well podded pyroxene garnet hornfels, it is a competant unit, unbroken by faults, and with a normal amount of jointing. Small scale (1 cm) rehealed movements are locally present eg. 14.6 m.

The unit is variably mineralised to 14.1 m, probably averaging 0.3% WO_3. Beyond this point, it is completely barren and no andradite garnet is present, only grossular.

The last 30 cm of the unit is entirely biotite pyroxene hornfels well intermixed and probably represent the top of the pyroxene garnet hornfels sequence. It carries some pyrhotite

19.5 - 23.1 DECLINE FAULT ZONE

A zone of poor core recovery mostly broken and fragmented into pieces of about 1 cm size. These pieces show abundant slickenslides.

Some large pieces of core (5 - 15 cm) were recovered in the initial part of the fault and these show a disturbed sheared fabric.

From about 19.9 - 20.2 m is the pughy clay cemented sand/gravel size, core of the fault.

The Lithologys present are biotite hornfels and pyroxene hornfels, biotite hornfels dominant.

23.1 - 30.7 B LENS SKARN

This unit consists almost entirely of garnet pyroxene hornfels, poorly mineralised to about 0.2 - 0.3% WO_3.

There is a network of carbonate veins through it.

A zone of broken core and poor recovery from 25.0 - 25.4 m probably represents a small fault.

Small open cavities are present from 25.9 - 26.3 m where incomplete calcite recementation has occured.

30.7 - 33.5 ?VOLCANICS & FAULT ZONE

Extensively fractured and broken core, almost all pieces showing slickenslides.

The core is either in sections 5-15cm long or in small fragments of 1-2 cm.

The lithology is a khaki green, fine grained, dense rock, carrying some pyrite. It has a well developed fabric running @ 30^{o} to LCA. It is thought this probably represent bedding in a tuffaceous layer.

EOH 33.5 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/24

PLANNING

PROPOSER: R.E.S. Davies DEPTH: 20 m

LOCATION: W64, -200 m R.L. Strike Drive

PURPOSE OF HOLE: Test Decline Fault and B Lens

PROPOSED CO-ORDS: 220 324 E 564 018 N

INCLINATION: 0°

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 101° 50' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 325.6 E 564 019.4 N

R.L. OF COLLAR: -200.1

INCLINATION OF HOLE: +00° 29'

PICKED UP BY: M. Marchant DATE: 24/5/80

SUMMARY

LOGGED BY: R.E. Sandell Davies

RESULTS: 14.0 - 17.0 m, 3 m @ 0.70% WO_3
25.0 - 28.0 m, 3 m @ 0.70% WO_3
40.0 - 42.0 m, 2 m @ 1.54% WO_3
} B Lens Decline

DRILLING

DATE COMMENCED: 5/5/80 DATE TERMINATED: 12/5/80

DRILLER/CONTRACTOR: S. Batchelor/ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: NQ
DEPTH:

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 43.0 m

REASON FOR TERMINATION: Passed through B Lens

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: Nil

BORE HOLE SURVEY: Multishot

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/24

Surveyed method: Multishot
Final depth: 43.0 m
Casing depth: Nil

Depth surveyed to: 39 m
Date surveyed: 12/5/80
Surveyed by: B. Schneiders
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			
4°	102°	92°	90°	0°			
12°	101°	91°	90°	0°			
24°	101°	91°	90°	0°			
32°	101°	91°	90°	0°			
39°	101°	91°	90°	0°			
43°	101°	91°	90°	0°			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/24

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.5	2.5	2.0	80
2.5 - 4.2	1.7	1.3	76
4.2 - 5.3	1.1	0.3	27
5.3 - 6.0	0.7	0.2	29
6.0 - 6.7	0.7	0.4	57
6.7 - 7.8	1.1	0.8	73
7.8 - 9.0	1.2	0.9	75
9.0 - 9.8	0.8	0.3	38
9.8 - 10.8	1.0	0.7	70
10.8 - 11.3	0.5	0.3	60
11.3 - 12.2	0.9	0.6	67
12.2 - 13.1	0.9	0.5	56
13.1 - 13.8	0.7	0.6	86
13.8 - 15.3	1.5	1.5	100
15.3 - 16.6	1.3	1.3	100
16.6 - 18.0	1.4	1.5	100
18.0 - 19.5	1.5	1.5	100
19.5 - 21.0	1.5	1.5	100
21.0 - 22.5	1.5	1.5	100
22.5 - 24.0	1.5	1.5	100
24.0 - 25.5	1.5	1.5	100
25.5 - 27.0	1.5	1.5	100
27.0 - 28.5	1.5	1.5	100
28.5 - 30.0	1.5	1.5	100
30.0 - 31.0	1.0	1.0	100
31.0 - 32.5	1.5	1.5	100
32.5 - 34.0	1.5	1.5	100
34.0 - 35.5	1.5	1.5	100
35.5 - 37.0	1.5	1.3	87
37.0 - 38.5	1.5	1.3	87
38.5 - 39.0	0.5	0.4	80
39.0 - 39.8	0.8	0.6	75
39.8 - 40.5	0.7	0.3	43
40.5 - 41.3	0.8	0.8	100
41.3 - 42.0	0.7	0.6	86
42.0 - 43.0	1.0	1.0	100
EOH 43.0 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/24

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0	0		
1.0 - 2.0	50		
2.0 - 3.0	70		
3.0 - 4.0	0		
4.0 - 5.0	0		
5.0 - 6.0	0		
6.0 - 7.0	22		
7.0 - 8.0	35		
8.0 - 9.0	10		
9.0 - 10.0	0		
10.0 - 11.0	0		
11.0 - 12.0	10		
12.0 - 13.0	10		
13.0 - 14.0	49		
14.0 - 15.0	90		
15.0 - 16.0	90		
16.0 - 17.0	90		
17.0 - 18.0	90		
18.0 - 19.0	70		
19.0 - 20.0	20		
20.0 - 21.0	20		
21.0 - 22.0	46		
22.0 - 23.0	40		
23.0 - 24.0	66		
24.0 - 25.0	46		
25.0 - 26.0	40		
26.0 - 27.0	20		
27.0 - 28.0	35		
28.0 - 29.0	60		
29.0 - 30.0	46		
30.0 - 31.0	10		
31.0 - 32.0	20		
32.0 - 33.0	20		
33.0 - 34.0	25		
34.0 - 35.0	50		
35.0 - 36.0	0		
36.0 - 37.0	0		
37.0 - 38.0	20		
38.0 - 39.0	0		
39.0 - 40.0	20		
40.0 - 41.0	0		
41.0 - 42.0	0		
42.0 - 43.0	0		
EOH 43.0 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/24

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. O. C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 3.1	pgh	5		Chlor/cc			69	
3.1 - 13.8	DFZ	20		Clay/chlor/gauge			12	
13.8 - 35.0	B Lens	5-8		Clay/cc/chlor			18	
35.0 - 41.4	B Lens	10-20		Chlor/gauge/cc/clay			31	
41.4 - 43.0	bh	12		ph/cc/chlor			39	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/24

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12144	0	1	1.0	1.0	0.02	0.01		
45	1	2	"	"	0.01	0.01		
46	2	3	"	"	0.01	0.01		
47	3	4	"	"	0.01	0.01		
48	4	5	"	"	0.01	0.01		
49	5	6	"	"	0.01	0.01		
50	6	7	"	"	0.04	0.01		
51	7	8	"	"	0.05	0.01		
52	8	9	"	"	0.01	0.01		
53	9	10	"	"	0.01	0.01		
54	10	11	"	"	0.01	0.02		
55	11	12	"	"	0.01	0.01		
56	12	13	"	"	0.01	0.02		
57	13	14	"	"	0.05	0.01		
58	14	15	"	"	0.66	0.01		
59	15	16	"	"	0.81	0.02		
60	16	17	"	"	0.64	0.02		
61	17	18	"	"	0.13	0.01		
62	18	19	"	"	0.08	0.01		
63	19	20	"	"	0.07	0.01		
64	20	21	"	"	0.01	0.01		
65	21	22	"	"	0.01	0.01		
66	22	23	"	"	0.01	0.01		
67	23	24	"	"	0.01	0.01		
68	24	25	"	"	0.29	0.01		
69	25	26	"	"	0.66	0.01		
70	26	27	"	"	1.03	0.02		
71	27	28	"	"	0.41	0.02		
72	28	29	"	"	0.01	0.01		
73	29	30	"	"	0.01	0.01		
74	30	31	"	"	0.01	0.01		
75	31	32	"	"	0.01	0.01		
76	32	33	"	"	0.01	0.01		
77	33	34	"	"	0.01	0.01		
78	34	35	"	"	0.08	0.01		
79	35	36	"	"	0.01	0.01		
80	36	37	"	"	0.01	0.02		
81	37	38	"	"	0.01	0.01		
82	38	39	"	"	0.05	0.01		
83	39	40	"	"	0.01	0.01		
84	40	41	"	"	2.57	0.09		
85	41	42	"	"	0.51	0.01		
86	42	43	"	"	0.05	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320.24

0.0 - 3.1 m **PYROXENE GARNET HORNFELS**

Essentially unmineralised pyroxene garnet hornfels, podded texture well developed, competant ground.

Bedding is 49° to LCA @ 2.9 m

3.1 - 13.8 **DECLINE FAULT ZONE**

Core fragments are either about 1 cm or in short pieces of core up to 15 cm. Lithology is biotite pyroxene hornfels interbedded and disturbed. The mushy clay and sand sized core of the fault zone occurs from 3.1 - 6.0 m but is interspersed with sections of biotite hornfels. Very low recoveries were recorded here. Only rare flecks of scheelite are present.

Bedding is @ 60° to LCA @ 7.9 m
" 46° " 11.6 m

13.8 - 41.4 **B LENS**

This lens consists of alternating garnet hornfels, marble and pyroxene hornfels.

13.8 - 18.5 Well mineralised, high grade garnet skarn.

18.5 - 22.4 Fresh grey bedded marble some scheelite present. Pyroxene hornfels alteration occurs at 19.2 m
Bedding is @ 46° to LCA @ 21.4 m

22.4 - 27.0 Well mineralised medium grade garnet skarn and pyroxene hornfels

27.0 - 33.3 Mostly bedded, fresh grey marble, pyroxene hornfels alteration occurs @ 30 - 30.8 and the core is fractured and clayey. The marble is brecciated from 31.3 - 33.2 m but has been rehealed by carbonate vein fillings. Though often leaving small vughs and cavities.
Bedding is @ 35° to LCA @ 28.1 m
" 55° " 31 m

33.3 - 41.4 Poorly mineralised generally broken, disturbed and fractured pyroxene hornfels. Some large scheelite veins are present eg. 39.1 m.
From 35 - 35.8 the core is mostly broken and from 36 - 36.8 it consist of sand and gravel fragments in a clay matrix
From 39.7 - 41.4 the core is extensively broken into small fragments of 0.5 - 5 cm size. Many have slickensides an their surfaces.

41.4 - 43.0 **BIOTITE HORNELS**

Black fine grained biotite hornfels, carrying veins of pyroxene hornfels and marble. It is unmineralised and is often fractured.

EOH. 43.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D320/23

PLANNING

PROPOSER: R. H. Davies DEPTH: 35 m

LOCATION: 200 S/D W62

PURPOSE OF HOLE: Test B Lens amd Decline Fault

PROPOSED CO-ORDS: 220 318 E 564 006 N

INCLINATION: 0

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH: 35 m

CHECKED BY: S. G. Brown DATE: 30/4/80

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 104° 14' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 318.0 E 564 005.6 N

R.L. OF COLLAR: -199.7

INCLINATION OF HOLE: +00° 32'

PICKED UP BY: M. G. Marchant DATE: 24/5/80

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS:
5- 8 m, 3 m @ 0.54% WO_3
10-12 m, 2 m @ 0.99% WO_3
21-24 m, 3 m @ 0.99% WO_3
28-33 m, 5 m @ 0.74% WO_3

DRILLING

DATE COMMENCED: 29/4/80 DATE TERMINATED: 5/5/80

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: NQ
DEPTH: 44.8

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 44.8 m

REASON FOR TERMINATION: Passed through B Lens

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/23

Surveyed method: Multishot
Final depth: 44.8 m
Casing depth: Nil

Depth surveyed to: 38 m
Date surveyed: 5-5-80
Surveyed by: B.A. Schneiders
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			
6	104°	94°	90°	0°			
12	104°	94°	90°	0°			
24	104°	94°	90°	0°			
30	104°	94°	90°	0°			
38	104°	94°	90°	0°			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/23

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 4.0 m	4.0	4.0	100
4.0 - 5.5	1.5	1.4	93
5.5 - 7.5	2.0	2.3	115
7.5 - 9.6	2.1	2.1	100
9.6 - 10.5	0.9	0.9	100
10.5 - 12.0	1.5	1.5	100
12.0 - 13.0	1.0	0.9	90
13.0 - 13.4	0.4	0.3	75
13.4 - 16.4	3.0	2.8	93
16.4 - 17.0	0.6	0.5	83
17.0 - 17.8	0.8	0.4	50
17.8 - 19.0	1.2	1.1	92
19.0 - 19.8	0.8	0.7	88
19.8 - 20.9	1.1	1.1	100
20.9 - 22.5	1.6	1.6	100
22.5 - 23.5	1.0	1.0	100
23.5 - 25.0	1.5	1.5	100
25.0 - 2.60	1.0	1.0	100
26.0 - 27.5	1.5	1.5	100
27.5 - 29.0	1.5	1.5	100
29.0 - 30.5	1.5	1.5	100
30.5 - 32.0	1.5	1.5	100
32.0 - 32.8	0.8	0.8	100
32.8 - 34.3	1.5	1.3	87
34.3 - 35.0	0.7	0.4	57
35.0 - 35.8	0.8	0.7	88
35.8 - 36.9	1.1	0.9	82
36.9 - 38.1	1.2	1.1	92
38.1 - 38.7	0.6	0.5	83
38.7 - 39.5	0.8	0.7	88
39.5 - 41.0	1.5	1.5	100
41.0 - 41.8	0.8	0.7	88
41.8 - 42.8	1.0	0.8	80
42.8 - 43.0	0.2	0.2	100
43.0 - 44.8	1.8	1.2	67
EOH 44.8 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/23

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0	10		
1.0 - 2.0	15		
2.0 - 3.0	30		
3.0 - 4.0	50		
4.0 - 5.0	30		
5.0 - 6.0	80		
6.0 - 7.0	40		
7.0 - 8.0	30		
8.0 - 9.0	45		
9.0 - 10.0	45		
10.0 - 11.0	70		
11.0 - 12.0	70		
12.0 - 13.0	27		
13.0 - 14.0	48		
14.0 - 15.0	60		
15.0 - 16.0	75		
16.0 - 17.0	0		
17.0 - 18.0	0		
18.0 - 19.0	10		
19.0 - 20.0	37		
20.0 - 21.0	30		
21.0 - 22.0	40		
22.0 - 23.0	50		
23.0 - 24.0	40		
24.0 - 25.0	36		
25.0 - 26.0	30		
26.0 - 27.0	54		
27.0 - 28.0	37		
28.0 - 29.0	67		
29.0 - 30.0	38		
30.0 - 31.0	16		
31.0 - 32.0	20		
32.0 - 33.0	10		
33.0 - 34.0	20		
34.0 - 35.0	0		
35.0 - 36.0	0		
36.0 - 37.0	0		
37.0 - 38.0	0		
38.0 - 39.0	57		
39.0 - 40.0	42		
40.0 - 41.0	70		
41.0 - 42.0	60		
42.0 - 43.0	41		
43.0 - 44.0	36		
44.0 - 44.8	40		

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/23

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. O. C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 13.0 m	pgh	7-8		Chlor/cc			75	
13.0 - 18.0	DFZ	> 20		Chlor/clay			12	
18.0 - 34.0	B Lens	10-15		cc/Chlor/clay			72	
36.0 - 44.8	bph	15-> 20		Chlor/clay			18	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/23

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12111	0	1	1.0	1.0	0.16	0.01		
12	1	2	"	"	0.16	0.01		
13	2	3	"	"	0.01	0.01		
14	3	4	"	"	0.01	0.01		
15	4	5	"	"	0.02	0.01		
16	5	6	"	"	0.41	0.20		
17	6	7	"	"	0.39	0.01		
18	7	8	"	"	0.83	0.03		
19	8	9	"	"	0.10	0.01		
20	9	10	"	"	0.12	0.01		
21	10	11	"	"	0.38	0.01		
22	11	12	"	"	2.10	0.02		
23	12	13	"	"	0.01	0.01		
24	18	19	"	"	0.35	0.01		
25	19	20	"	"	0.01	0.01		
26	20	21	"	"	0.03	0.01		
27	21	22	"	"	1.10	0.01		
28	22	23	"	"	1.40	0.02		
29	23	24	"	"	0.47	0.01		
30	24	25	"	"	0.01	0.01		
31	25	26	"	"	0.01	0.01		
32	26	27	"	"	0.01	0.01		
33	27	28	"	"	0.01	0.01		
34	28	29	"	"	0.69	0.01		
35	29	30	"	"	0.53	0.01		
36	30	31	"	"	0.60	0.01		
37	31	32	"	"	0.68	0.01		
38	32	33	"	"	1.22	0.01		
39	33	34	"	"	0.01	0.01		
40	34	35	"	"	0.01	0.01		
41	35	36	"	"	0.38	0.01		
42	36	37	"	"	0.01	0.01		
43	37	38	"	"	0.04	0.06		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/23

0.0 - 13.0 m PYROXENE GARNET HONRFELS

Well podded typical pyroxene garnet hornfels. Mineralisation is present throughout but has varying grades.

13.0 - 18.0 DECLINE FAULT ZONE

Most of the core is this section is in fragments of 1-3 cm larger pieces of core up to 20 cm show partly rehealed breccia zones.

The lithology is mostly biotite hornfels but pyroxene garnet hornfels fragments are present, are confined to the larger pieces of core.

There is a 9 cm pug zone from 16.1 m, which consists of clay and rock flour particles loosely bound together with rare sand sized (2 mm) fragments.

18.0 - 36.0 B LENS

The basal contact is fault defined but the upper contact is taken as the limit of mineralisation in biotite pyroxene hornfels.

This unit consists of:

18.0 - 19.0 m Garnet Pyroxene Hornfels
19.0 - 20.7 m Marble disturbed
20.7 - 24.0 m Garnet Hornfels well mineralised
24.0 - 28.3 m Marble, mostly brecciated and rehealed. Open vughs
24.0 - 28.3 locally present e.g. 26 - 28 m.
28.3 - 33.0 m Massive well mineralised garnet hornfels, broken and loose core together with poor core recovery @ 30 m indicates faulting.
33.0 - 36.0 m Poorly mineralised biotite pyroxene hornfels, extremely fractured, most pieces of core are less than 5 cm long.

36.0 - 44.8 BIOTITE PYROXENE HORNFELS

Finely interbedded biotite hornfels and pyroxene hornfels, rarely disturbed but sheared and broken in many places especially 36.8 - 38.0 m, 38.3 - 38.5 m, 42.7 - 43.1 m.

The unit is barren apart from a scheelite vein @ 38.2 m

Bedding is @ 60^{o} to LCA @ 38.0 m
47^{o} 45.6 m
62^{o} 42.6 m

EOH 44.8 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/22

PLANNING

PROPOSER: R. H. Davies DEPTH: 20 m

LOCATION: 200 S/D W68

PURPOSE OF HOLE: Test Decline Fault and Footwal contact of B Lens

PROPOSED CO-ORDS: 220 324 E 564 048 N

INCLINATION: 0

BEARING: 102° °GRID °MAG

TARGET: E N

DEPTH: 20 m

CHECKED BY: S.G. Brown DATE: 28/4/80

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 101° 10' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 325.8 E 564 048.6 N

R.L. OF COLLAR: -200.6

INCLINATION OF HOLE: +00° 07'

PICKED UP BY: M. Marchant DATE: 24/5/80

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: B Lens 1 m @ 0.33

No significant Mineralisation

DRILLING

DATE COMMENCED: 12.5.80 DATE TERMINATED: 15.5.80

DRILLER/CONTRACTOR: S. Batchelor/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: NQ
DEPTH:

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 18.0 m

REASON FOR TERMINATION: Passed through Decline Fault Zone

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/22

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.4 m	1.4	1.2	86
1.4 - 3.0	1.6	1.4	88
3.0 - 3.8	0.8	0.6	75
3.8 - 5.4	1.6	0.9	56
5.4 - 6.2	0.8	0.2	25
6.2 - 7.0	0.8	0.6	75
7.0 - 7.6	0.6	0.5	83
7.6 - 8.8	1.2	1.2	100
8.8 - 9.3	0.5	0.3	60
9.3 - 10.5	1.2	1.2	100
10.5 - 10.7	0.2	0.2	100
10.7 - 11.5	1.2	0.9	75
11.5 - 13.0	1.5	1.5	100
13.0 - 14.0	1.0	0.9	90
14.0 - 14.3	0.3	0.2	67
14.3 - 15.2	0.9	0.8	89
15.2 - 16.8	1.6	1.6	100
16.8 - 18.0	1.2	1.3	108
EOH 18.0 m			

GEOLOGY - KING ISLAND SCHEELITE

LENGTH OF CORE GREATER THAN 10 CM PER METRE

D.D.H. No. D 320/22

INTERVAL (m)	LENGTH (cm)	INTERVAL (m)	LENGTH (cm)
0.0 - 1.0	60		
1.0 - 2.0	50		
2.0 - 3.0	30		
3.0 - 4.0	24		
4.0 - 5.0	0		
5.0 - 6.0	11		
6.0 - 7.0	21		
7.0 - 8.0	33		
8.0 - 9.0	30		
9.0 - 10.0	30		
10.0 - 11.0	50		
11.0 - 12.0	40		
12.0 - 13.0	60		
13.0 - 14.0	47		
14.0 - 15.0	30		
15.0 - 16.0	90		
16.0 - 17.0	70		
17.0 - 18.0	80		

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/22

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A.O.C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 4.1	bph	12-15		chlor			66	
4.1 - 7.7	DFZ	> 20		chlor/clay/gouge			0	
7.7 - 14.75	bph	5-20		chlor/gouge/sulph			30	
14.75 - 18.0	B Lens	6-8		cc/chlor			78	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/22

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12187	8	9	1.0	1.0	0.03	0.01		
88	9	10	"	"	0.02	<0.01		
89	10	11	"	"	<0.01	<0.01		
90	11	12	"	"	<0.01	<0.01		
91	12	13	"	"	<0.01	<0.01		
92	13	14	"	"	0.03	<0.01		
93	14	15	"	"	<0.01	<0.01		
94	15	16	"	"	0.26	0.01		
95	16	17	"	"	0.33	<0.01		
96	17	18	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/22

0.0 - 4.1 m BIOTITE PYROXENE HORNFELS

Mostly black fine grained biotite hornfels with thin (1 cm) interbeds of pyroxene hornfels.

Bedding is @ 49° to LCA @ 0.8 m
33 4.0 m

4.1 - 7.7 DECLINE FAULT ZONE

The fault is lithologically identical to the rock units on either side i.e. biotite pyroxene hornfels and thus there are no clear contacts. It is logged here as an area of broken and brecciated core. Most pieces being about 2-5 cm in size but occasionally sections of core up to 9 cm are present.

High core loss was recorded at around 5 m and this is associated with the charachteristic clay cemented sand/gravel centre of the Fault Zone, here about 10 cm thick.

Bedding is @ 55° to LCA @ 6.4 m
50 7.4 m

7.7 - 14.75 BIOTITE PRYOXENE HORNFELS

This biotite pyroxene hornfels unit has a higher percentage of pyroxene hornfels, about 40% and is also bedded. Rare scheelite is present. Several zones of fractured and broken core are present at: 9.2 - 9.3 m, 10.5 - 11.5 m, 13.7 - 14.75 m.

Bedding is @ 47° to LCA @ 8 m
60° 9.9 m
52° 12.2 m
36° 13.6 m

14.75 - 18.00 B LENS

This unit consists of a footwall replacement zone of pyroxene hornfels and garnet hornfels from 14.75 - 16.8 m which is mineralised. The remainder of the core is fresh grey marble.

Bedding is @ 48° to LCA @ 17 m

EOH 18.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/21

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S9 Diamond Drill Drive

PURPOSE OF HOLE: To Define Southern Area

PROPOSED CO-ORDS: 220320 E 563900 N

INCLINATION: -50

BEARING: 180 °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 177°00' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.4 E 563898.8 N

R.L. OF COLLAR: -237.2

INCLINATION OF HOLE: -49°31'

PICKED UP BY: W. Davies DATE: 15/6/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 58-60m, 2m @ 0.74% WO_3, 0.02% Mo.
64-72m, 8m @ 0.84% WO_3, 0.01% Mo.

DRILLING

DATE COMMENCED: 6/6/79 DATE TERMINATED:

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 116.70

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 166.70

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multi -shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/21

Surveyed method: Mulitshot
Final depth: 116.75 m
Casing depth: 1.00 m

Depth surveyed to: 56.00
Date surveyed: 15/6/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	E
16.00	177°	167°	40°	-50°	12.26	10.02	2.31
31.00	178°	168°	40°	-50°	23.75	19.45	4.31
43.00	179°	169°	40°	-50°	32.94	27.02	5.78
46.00	178°	168°	39° 45'	-50° 15'	35.25	28.90	6.18
56.00	179°	169°	39° 45'	-50° 15'	42.94	35.17	7.40
76.00	180°	170°	39° 45'	-50° 15'	58.32	47.77	9.62
116.75	180°	170°	39° 30'	-50° 30'	89.76	73.30	14.12

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/21

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.80	2.8	2.8	100
2.8 - 5.95	3.15	3.15	100
5.95 - 8.95	3.0	3.0	100
8.95 - 11.95	3.0	3.0	100
11.95 - 14.95	3.0	3.0	100
14.95 - 16.85	1.9	1.9	100
16.85 - 17.85	1.0	1.0	100
17.85 - 18.50	0.65	0.65	100 broken
18.50 - 19.50	1.0	1.0	100
19.50 - 22.50	3.0	3.0	100
22.50 - 25.50	3.0	3.0	100
25.50 - 28.50	3.0	3.0	100
28.50 - 31.50	3.0	3.0	100
31.50 - 24.50	3.0	3.0	100
34.50 - 37.60	3.1	3.1	100
37.60 - 40.60	3.0	3.0	100
40.60 - 43.50	2.9	2.9	100
34.50 - 46.50	3.0	3.0	100
46.50 - 52.50	6.0	6.0	100
52.50 - 55.50	3.0	3.0	100
55.50 - 58.5	3.0	3.0	100
58.5 - 61.50	3.0	3.0	100
61.5 - 64.50	3.0	3.0	100
64.5 - 67.5	3.0	3.0	100
67.5 - 70.35	2.85	2.85	100
70.35 - 71.94	1.59	1.59	100
71.94 - 74.6	2.66	2.30	86
74.6 - 77.5	2.9	2.9	100
77.5 - 79.65	2.15	2.15	100
79.65 - 82.65	3.0	3.0	100
82.65 - 85.45	2.80	2.80	100
85.45 - 88.35	2.90	2.90	100
88.35 - 90.25	1.90	1.90	100
90.25 - 92.35	2.10	2.10	100
92.35 - 94.90	2.55	2.55	100
94.90 - 96.85	1.95	1.95	100
96.85 - 99.10	2.25	2.25	100
99.10 - 102.05	2.95	2.95	100
102.05 - 104.95	2.90	2.90	100
104.95 - 107.90	2.95	2.95	100
107.90 - 110.90	3.0	2.75	92
110.90 - 113.85	2.95	2.95	100
113.85 - 116.75	2.90	2.90	100
EOH 116.75m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/21

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. O. C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 25.5	Bh	4-7		Chl/carb/sulph	30° - 19.1 35° - 25.2		84	
25.5 - 49.3	Ph/ch	6-8		Chl/carb/sulph	33° - 26.25 38° - 31.8 50° - 36.8 55° - 40.3 50° - 42.5 45° - 44.3		76	
49.3 - 62.1	Ch	5		Chl/clay/carb/sulph			79	
62.1 - 69.8	Bh/skarn	7		Chl/carb/clay			58	
69.8 - 75.3	B lens	2-12		Chl/carb/clay	49° - 70.5°		63	
75.3 - 112.0	Bh	2-15		Chl/carb/clay			61	
112.0 - 116.75	Granite	5-10		Qtz/carb			39	
EOH 166.75m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/21

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 10654	54	55	1.0	1.0	<0.01	<0.01		
55	55	56	"	"	<0.01	<0.01		
56	56	57	"	"	0.07	<0.01		
57	57	58	"	"	0.03	0.02		
58	58	59	"	"	0.71	0.02	2m @	0.74% WO_3
59	59	60	"	"	0.77	0.02	&	0.02% Mo
60	60	61	"	"	<0.01	0.01		
61	61	62	"	"	0.06	0.02		
62	62	63	"	"	<0.01	0.02		
63	63	64	"	"	0.14	<0.01		
64	64	65	"	"	0.94	0.01		
65	65	66	"	"	0.81	0.02		
66	66	67	"	"	0.99	0.02		
67	67	68	"	"	0.95	<0.01	8m @	0.84% WO_3
68	68	69	"	"	1.32	<0.01		& 0.01% Mo
69	69	70	"	"	1.08	0.01		
70	70	71	"	"	0.04	<0.01		
71	71	72	"	"	0.62	0.01		
72	72	73	"	"	<0.01	0.01		
73	73	74	"	"	<0.01	<0.01		
74	74	75	"	"	<0.01	<0.01		
75	75	76	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/21

0.0 - 25.25m **BIOTITE HORNFELS**

Dark blackish to brownish coloured biotite hornfels with increasing pyroxene hornfels bands and patches towards the base of the unit (18.5 - 25.25m).

From 0.0 - 9.5m, the unit is a disturbed, light brownish coloured, mottled-like textured biotite hornfels similar to that logged in other holes along the S9 drive. The unit is distinctive and can be used for correlation purpose.

The unit from 9.5 - 25.25m is a dark blackish biotite hornfels.

From 16.0 - 25.25m the unit is quite fractured and broken. Probable fault zones occur at 17.8m, 19.15 (recemented breccia); 20.70m, around 23.2m.

Bedding	30^{o}	to	LCA	at 19.1m
Bedding	35^{o}			25.2m

25.25 - 33.90 **PYROXENE HORNFELS**

Greenish coloured pyroxene hornfels with rare patches of unaltered biotite hornfels. Pyrite appear to be common throughout. No scheelite is present.

Bedding	33^{o}	to	LCA	at 26.25m
Bedding	38^{o}			31.80m

33.90 - 36.7 **PYROXENE GROSSULAR ROCK**

A pyroxene - grossular rich unit a somewhat mottled texture. Rare scheelite specks are present.

36.7- - 62.10 **B-LENS MARBLE**

Dominantly grey coloured, virtually barren marbles exhibiting good bedding..

Some patchy scheelite is present 40.7 - 40.85m; 46.7 - 49.95m; 57.7 - 60.15m, (63.0 - 69.8m (high grade)).

Some of the joints and fractured in the marble are replaced to a zone of cream-grey coloured clay ie. at 41.3m; 47.25m.

A possible tuffite unit (looks more like volcanics) occurs from 37.75 - 40.30m. The unit is greenish in colour, spotted and carries no scheelite. It is broken and fractured in places.

Bedding	50^{o}	to	CLA	at 36.8m
Bedding	55^{o}			40.3m
Bedding	50^{o}			42.5m
Bedding	45^{o}			44.3m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/21

The following fault zones were noted 52.90 - 53.0m (sheared, clay pug at 10° to LCA), 57.9 - 58.1m (slickensides, clay, pug, sulphides), 60.4 - 60.5 (sheared, claypug).

Broken and fractured core occurs from 54.55m. A pyroxene rich skarn with disseminated scheelite occurs form 57.7 - 60.15m.

62.10 - 62.90 BIOTITE HORNFELS

Fine grained dark black biotite hornfels with minor pyroxene hornfels alteration bands.

A fault occurs at the base of the unit evidenced by broken core and slickensides.

62.90 - 69.8 PYROXENE SKARN

A coarse grained pyroxene hornfels rich andradite skarn with high grade scheelite present (1% WO_3).

The zone from 62.9 - 63.8 appears to be the pyroxene - grossular rich rock adjacent to many faults.

The unit appears to grade into marble at the base.

69.8 - 75.5 B-LENS

Typical B-lens consisting of the following subdivisions -

69.8 - 71.1m	Dominantly grey coloured, poorly mineralised marble
71.1 - 71.7	Pyroxene skarn with good disseminated scheelite (1% WO_3 visual est.)
71.7 - 74.1	Dominantly grey coloured marble with minor pyroxene hornfels zones - poorly mineralised
74.1 - 75.5	Pyroxene skarn (grossular garnet) - poorly mineralised and greenish in colour. The unit is disturbed, especially around 74.6m where clay and rubble is common.

Bedding 49° to LCA at 70.5m

75.5 - 112.0 BIOTITE HORNFELS

Generally massive, dark to light grey colour. Metamorphic spotting developed from 100.75 - 108.0m. Aplite dykes at:

76.9 - 7.0m
81.9 - 82.8m
89.3 - 89.4
91.3 - 91.4
101.2 - 101.35
108.1 - 108.9

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/21

The unit is fractured and broken @:

76.5m	virtually all have
81.8m	slick 'n' slides
85.1m	
90.3m	
93.7 - 95m	
96	
96.85	
98	
99	
108 - 112	The 4m above the granite contact.

Pyroxene hornfels occur irregular by between 75.3m and 85m.

112.0 - 116.75 GRANITE/ADAMELLITE

Generally massive but open cavaties and vughs at 116.0 - 116.75 associated with joisting 22° to long axis. Rock is generally light in colour with some oxidation of iron (orange patches)

Fine to medium grained granite with numerous open iron stained vughs and cavities at the bottom of the hole from 116.0 - 116.75m. Jointing here is at 22° to LCA.

Biotite appears to have altered to a green coloured amphibole or chlorite.

EOH 116.75m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/20

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S9 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens Wedge Area

PROPOSED CO-ORDS: 220320 E 563900 N

INCLINATION: -14^{o}

BEARING: 0^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 357^{o} 00^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.8 E 563902.3 N

R.L. OF COLLAR: -236.2

INCLINATION OF HOLE: -12^{o} 40'

PICKED UP BY: W. Davies DATE: 15/6/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 24 - 26m 2m @ 1.73% WO_3 'C' Wedge Hangingwall
28 - 42m 14m @ 1.48% WO_3 'C' Wedge Footwall

DRILLING

DATE COMMENCED: 4/6/79 DATE TERMINATED: 6/6/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 50m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 50.00m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multi shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/20

Surveyed method: Multishot
Final depth: 50.00m
Casing depth: -

Depth surveyed to: 22.00
Date surveyed: 15/6/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
7.00	359°	349°	77° 15'	-12° 45'	1.54	6.70	1.30
18.00	356	346	77 00	-13 00	4.02	17.10	3.89
22.00	357	347	76 30	-13 30	4.95	20.89	4.77
50.00	357	347	76 30	-13 30	11.49	47.42	10.90

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/20

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY	
0.0 - 4.3	4.3	4.3	100	
4.3 - 5.8	1.5	1.5	100	
5.8 - 7.4	1.6	1.6	100	
7.4 - 7.8	0.4	0.4	100	
7.8 - 8.8	1.0	1.0	100	
8.8 - 11.7	2.9	2.9	100	
11.7 - 13.3	1.6	1.6	100	
13.3 - 14.05	0.75	0.75	100	broken
14.05 - 14.70	0.65	0.65	100	"
14.70 - 15.35	0.65	0.65	100	"
15.35 - 16.00	0.65	0.65	100	"
16.00 - 16.85	0.85	0.85	100	"
16.85 - 18.30	1.45	1.45	100	"
18.30 - 19.90	1.6	1.6	100	"
19.90 - 20.85	0.95	0.8	84	"
20.85 - 21.53	0.68	0.68	100	"
21.53 - 23.70	2.17	2.17	100	
23.70 - 26.70	3.0	3.0	100	
26.70 - 29.70	3.0	3.0	100	
29.70 - 32.70	3.0	3.0	100	
32.70 - 35.70	3.0	3.0	100	
35.70 - 38.70	3.0	3.0	100	
38.70 - 41.70	3.0	3.0	100	
41.70 - 44.70	3.0	3.0	100	
44.70 - 47.35	2.65	2.65	100	
47.35 - 50.0	2.65	2.65	100	
EOH 50.00m				

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/20

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. O. C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 13.3m	Bh	3-12		Chl/clay/carb/sulph		100	69	
13.3 - 22.47	Bh	8- 20		Chl/clay/carb/sulph		98	30	
22.47 - 50.0	M/M Banded gh	4-6		Chl/clay/carb/sulph		100	83	
EOH 50.0m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/20

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 10604	20	21	1.0	1.0	<0.01	0.01		
05	21	22	"	"	<0.01	0.02		
06	22	23	"	"	0.42	0.02		
07	23	24	"	"	0.16	0.01		
08	24	25	"	"	2.38	0.02	5m @	0·82% WO_3
09	25	26	"	"	1.07	<0.01		& 0·01% Mo
10	26	27	"	"	0.05	0.01		
11	27	28	"	"	<0.01	0.02		
12	28	29	"	"	0.61	0.01		
13	29	30	"	"	2.21	0.04		
14	30	31	"	"	1.86	0.03		
15	31	32	"	"	1.67	0.04		
16	32	33	"	"	0.38	0.01		
17	33	34	"	"	1.51	0.02		
18	34	35	"	"	~~8.30~~	0.12	14 m	@ 1·48% WO_3
19	35	36	"	"	2.19	0.04		& 0·03% Mo.
20	36	37	"	"	0.10	0.01		
21	37	38	"	"	~~6.90~~	0.11		
22	38	39	"	"	0.20	<0.01		
23	39	40	"	"	0.70	0.01		
24	40	41	"	"	0.91	0.02		
25	41	42	"	"	0.44	0.01		
26	42	43	"	"	0.12	<0.01		
27	43	44	"	"	0.24	0.01		
28	44	45	"	"	0.01	0.01		
29	45	46	"	"	0.47	0.01		
30	46	47	"	"	0.21	<0.01		
31	47	48	"	"	0.37	0.01	5m @	0·66% WO_3
32	48	49	"	"	1.10	0.01	&	0·01% Mo.
33	49	50	"	"	1.14	0.03		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/20

0.0 - 21.00m **BIOTITE HORNFELS**

Fine grained spotted in parts, dark brown to blackish coloured biotite hornfels with no visible scheelite present.

The following structural and stratigraphic division are noted -

0.0	- 2.1(?)	Light brownish coloured biotite hornfels similar to that intersected in other holes along S9.
0.0	- 13.0	Reasonably competent rock with minor fracturing from 6.0 - 9.0m. A probable fault occurs around 8.0m and 8.8m.
13.0	- 21.0	Fractured, broken and incompetent rock with numerous rubble/fault zones ie. 13.3 - 14.05m; 18.30m; and 20.85m.

21.00 - 22.47 **PYROXENE HORNFELS**

Greenish coloured and fine grained pyroxene hornfels with no visible scheelite present. Minor fracturing and faulting is present.

22.47 - 23.05 **FAULT ZONE**

Sheared and partly fractured fault zone consisting of mainly biotite hornfels with a major fault at 32.8 - 23.05m (carbonate veining, clay, pug and breccia). Some scheelite mineralisation is present.

23.05 - 23.95 **PYROXENE GROSSULAR ROCK**

A poorly patchily mineralised pyroxene-grossular rich rock adjacent to the rock above.

23.95 - 26.50 **ANDRADITE SKARN - UPPER C (?)**

Coarse grained, well mineralised andradite garnet skarn with no visible bedding. Some of the core is fractured and broken.

26.50 - 30.25(?) **MARBLE MARKER**

Patchily mineralised marble marker consisting of biotite hornfels pyroxene hornfels and minor skarn.

Contact with upper C above appears stratigraphic, however, the lower contact is a guess and could be considerably further down the hole. The marble marker is anticipated to be mineralised and together with the low bedding angles, is causing all the trouble in defining an accurate footwall contact.

Bedding 28^{o} to LCA at 27.15m

A pyroxene-quartz-scheelite rich rock occurs at the base around 29.9 - 30.0m and 30.2 - 30.25m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/20

30.25 - 50.00 BANDED SKARN

Well bedded sequence of Lower C consisting of biotite hornfels/ pyroxene hornfels/marble, andradite and grossular garnet. The unit is well mineralised, but some unmineralised or poorly mineralised segments are present ie. 38.2 - 38.9m. Marble mainly with grossular beds.

41.3 - 45.0m Interbedded pyroxene hornfels, grossular, marble and volcanics(?). The volcanics looking rock occurs from 43.15 - 44.60m.

Shallow dips accentrate the thickness of the units.

Possible/probable fault zones occuring in the unit are at 37.7 - 37.75 (breccia, clay, pug); 38.7m (rubble/breccia); and 47.25 - 47.35m (broken, sheared and slickensided.

Bedding	22^{o}	to	LVA at	30.4m
Bedding	30^{o}			35.35m
Bedding	25^{o}			39.1m
Bedding	18^{o}			44.8m
Bedding	17^{o}			48.8m

EOH 50.0m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/19

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S9 Diamond Drill Drive

PURPOSE OF HOLE: To Define Southern Area

PROPOSED CO-ORDS: 220320 E 563900 N

INCLINATION: -90°

BEARING: - °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 83° 10' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.9 E 563900.6 N

R.L. OF COLLAR: R-237.1

INCLINATION OF HOLE: -88° 50'

PICKED UP BY: R. Howman DATE: 1/6/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 38 - 42m 4m @ 0.60 B Lens

DRILLING

DATE COMMENCED: 24.5.79 DATE TERMINATED: 1/6/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 75.5

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 75.50m

REASON FOR TERMINATION: Intersected Basement Granite

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot to 75.50m

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D320/19

Surveyed method: Multishot
Final depth: 75.50m
Casing depth: 1.00m

Depth surveyed to: 75.50m
Date surveyed: 4.6.79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	E
7.00	101°	91°	1°	-89°	7.00	.00	.12
19.00	128°	118°	1° 15'	-88° 45'	19.00	.12	.35
34.00	90 °30'	80° 30'	1° 30'	-88° 30'	34.00	.18	.73
49.00	110°	100°	2°	-88°	48.99	.27	1.24
64.00	104°	94°	1°	-89°	63.99	.29	1.50
75.50	117°	107°	1°	-89°	75.49	.35	1.69

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/19

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0m	2.0	1.7	85
2.0 - 3.5	1.5	1.5	100
3.5 - 6.4	2.9	2.9	100
6.4 - 9.3	2.9	2.9	100
9.3 - 12.3	3.0	3.0	100
12.3 - 15.0	2.7	2.7	100
15.0 - 18.0	3.0	3.0	100
18.0 - 19.6	1.6	1.6	100
19.6 - 22.6	3.0	3.0	100
22.6 - 24.7	2.1	2.1	100
24.7 - 24.8	0.1	0.1	100
24.8 - 26.2	1.4	1.4	100 broken
26.2 - 27.1	0.9	0.9	100 "
27.1 - 27.8	0.7	0.7	100 "
27.8 - 28.4	0.6	0.6	100 "
28.4 - 29.1	0.7	0.6	86 "
29.1 - 30.2	1.1	1.1	100 "
30.2 - 31.1	0.9	0.9	100 "
31.1 - 32.0	0.9	0.9	100 "
32.0 - 34.7	2.7	2.7	100
34.7 - 37.1	2.4	2.4	100
37.1 - 38.5	1.4	1.4	100
38.5 - 41.3	2.8	2.8	100
41.3 - 44.3	3.0	3.0	100
44.3 - 47.3	3.0	3.0	100
47.3 - 50.3	3.0	3.0	100
50.3 - 53.0	2.7	2.7	100
53.0 - 54.5	1.5	1.5	100
54.5 - 57.5	3.0	3.0	100
57.5 - 60.5	3.0	3.0	100
60.5 - 63.5	3.0	3.0	100
63.5 - 66.5	3.0	3.0	100
66.5 - 69.5	3.0	3.0	100
69.5 - 72.5	3.0	3.0	100
72.5 - 75.5	3.0	3.0	100

EOH 75.5m

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/19

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. O. C.)	% CORE RECO-VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 22.60	Bh	5-10		Chl/clay/carb/sulph		99	78	
22.60 - 32.35	Bh	5- 20		Chl/clay/carb/sulph		99	50	
32.35 - 40.80	Bh	5-6		Chl/clay/carb		100	87	
40.80 - 41.10	F A U L T							
41.10 - 48.10	Bh/Ph L.V.	3-6		Chl/caly/sulph		100	82	
48.10 - 70.80	Bh/Ph	6-20		Chl/slay/sulph/carb		100	69	
70.8 - 75.5	Ad	6-8		Clay/Fe		100	66	
EOH 75.5m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/19

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 10949	32	33	1.0	1.0	0.01	0.01		
50	33	34	"	"	0.04	0.01		
51	34	35	"	"	0.14	0.01		
52	35	36	"	"	0.01	0.01		
53	36	37	"	"	0.20	0.02		
54	37	38	"	"	0.26	0.02		
55	38	39	"	"	0.98	0.02		
56	39	40	"	"	0.58	0.01		
57	40	41	"	"	0.27	0.01		
58	41	42	"	"	0.55	0.01		
59	42	43	"	"	<0.01	<0.01		
60	43	44	"	"	0.76	0.01		
61	44	45	"	"	0.03	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/19

0.0 - 32.35m **BIOTITE HORNFELS**

Fine to medium grained, grey to brownish coloured biotite hornfels with numerous pyroxene-actinolite alteration zones and patches.

Minor metamorphic spotting occurs in the biotite hornfels from 9.3 - 10.5m, 24.7 - 25.0m. Carbonate veining along joints and fractures is common.

The following broken core zones were noted -

0.0 - 1.0m (Due to blasting of S9 drive); 9.9m (carbonate filled fault); 12.9 - 13.3m (broken , fractured and minor clay pug); 19.2m (minor fault with chloritic pug); 19.6m (minor rubble); 22.6 (broken core); 24.0 - 32.35m (very fractured and broken with the following fault zones - 28.6m; 29.1m (breccia); 30.2 - 30.5m (rubble, chloritic); 33.1 - 33.5m (rubble, slickensides, chloritic and rehealed).
Siliceous aplite dyke occurs from 21.2 - 21.9m.
Minor scheelite mineralisation occurs from 22.6 - 23.7m.

32.35 - 40.80 **?B-LENS - MINERALISED**

Disturbed and patchily mineralised ?B-lens in close proximity to several faults. Some unreplaced marble is present, as is abundant grossular, pyroxene and minor andradite.

The unit is quite faulted and disturbed towards the base on approaching the Wedge Fault zone. ie at 39.45m (breccia); 40.5 (chloritic clay pug and breccia); 40.8 - 41.10m (Breccia, clay, pug - Wedge Fault zone).

An aplite dyke occurs from 32.65 - 33.90m.

Disturbed bedding is present -

Bedding 55^{o} to LCA at 37.3m
Bedding 65^{o} 37.7m

Blue (pure scheelite) rimmed powellite (yellow fluorescing) occurs at 38.93m.

40.80 - 41.10m **WEDGE FAULT ZONE**

Disturbed, brecciated and fractued fault zone.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/19

41.10 - 44.90 BANDED FOOTWALL BEDS?

Possible banded footwall beds consisting of biotite hornfels, pyroxene hornfels and 'intrusive' (?) pyroxene - quartz rock with grossular garnet. Some patchy scheelite is present.

Bedding is well developed throughout -

Bedding	68^{o} to LCA at	41.5m
Bedding	60^{o}	43.45m

Biotite hornfels/pyroxene hornfels occurs mainly at the base of the unit.

44.90 - 48.10 LOWER VOLCANICS

Typical coarse grained Lower Volcanics with a cross-cutting hangingwall contact (intrusive?). No scheelite mineralisation is present.

48.10 - 70.80 BIOTITE HORNFELS/PYROXENE HORNFELS

Well bedded sequence of fine grained biotite hornfels/pyroxene hornfels with minor grossular interbeds and numerous aplitic dykes and veins (63.25 - 63.4m, 65.4 - 65.8m, 67.7 - 68.3m).

Some rare patchy scheelite is present.

The following broken core zones were noted - 58.15m (clay pug); 58.15 - 60m (numerous fault zones the largest occuring around 59.3 - 59.4m + chloritic clay pug and breccia);

Bedding	56^{o}	to	LCA at	52.0m
Bedding	60^{o}			57.9m
Bedding	50^{o}			61.5m
Bedding	63^{o}			64.25m
Bedding	53^{o}			67.4m

The base of the unit from 69.0 - 70.8 contains abundant bedded pyroxene hornfels

70.80 - 75.50 GRANITE/ADAMELLITE

Fine to coarse grained granite/adamellite with no visible scheelite present. Iron staining along joints and fractures is common.

EOH 75.50m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/18

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S13 Diamond Drill Drive

PURPOSE OF HOLE: To define C lens Wedge Area

CO-ORDS: 220 320 E 564 065 N

INCLINATION: -71°

BEARING: 180° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 167° 28' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220317.4 E 564064.5 N

R.L. OF COLLAR: -203.6

INCLINATION OF HOLE: -68° 35'

PICKED UP BY: W. Davies DATE: 19. 4.79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 1 - 9m, 8m @ 1.44% WO_3
13 - 37m, 24m @ 1.66% WO_3
41- 45m, 4m @ 0.55% WO_3

DRILLING

DATE COMMENCED: 10/4/79 DATE TERMINATED: 19/4/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 46.70

WEDGE PLACED: Nil DEPTH:

EXTENSION: Nil

FINAL DEPTH: 46.70m

REASON FOR TERMINATION: Hole hit T13 drive

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed to 46.70 single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/18

Survey method: Singleshot
Final depth: 46.70m
Casing depth: 1m

Depth surveyed to: 46.70m
Date surveyed: 19/4/79
Surveyed by: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read.	Corrected		S	E
6.70	165°	155°	22°	-68°	6.21	2.27	1.06
46.70	168°	158°	21°15'	-68.45'	33.98	12.35	5.13

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/18

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 -- 1.0	1.0	-	No recovery
1.0 -- 3.25	2.25	2.25	100
3.25 - 6.15	2.9	2.9	100
6.15 - 8.80	2.65	2.65	100
8.80 - 11.30	2.5	2.5	100
11.3 -- 13.2	1.9	1.9	100
13.2 - 16.2	3.0	3.0	100
16.2 - 18.6	2.4	2.4	100
18.6 - 21.6	3.0	3.0	100
21.6 - 24.0	2.4	2.4	100
24.0 - 25.2	1.2	1.2	100
25.2 - 27.7	2.5	2.5	100
27.7 - 30.7	3.0	3.0	100
30.7 - 33.2	2.5	2.5	100
33.2 - 34.5	1.3	1.3	100
34.5 - 36.1	1.6	1.6	100
36.1 - 38.1	2.0	2.0	100
38.1 - 40.7	2.6	2.6	100
40.7 - 42.5	1.8	1.8	100
42.5 - 44.2	1.7	1.7	100
44.2 - 45.3	1.1	1.1	100
45.3 - 46.3	1.0	1.0	100
46.3 - 46.7	0.4	0.4	100
EOH 46.7m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 320/18

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 8.45	Gh	5-7		Chl/clay/carb		88	56	
8.45 - 13.75	M/M	6-7		Chl/carb/clay		100	86	
13.75 - 34.50	Banded gh	5-8		Chl/carb/clay		100	78	
34.50 - 35.0	FAULT					100		
35.0 - 44.65	Bfb	6-7		Chl/carb/clay		100	73	
44.65 - 46.70	Bph	13		Chl/clay/sulph		100	51	
EOH 46.7m								

FURTHER DATA & REMARKS

1. Deatiled % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 46TT

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D320/18

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 10330	1	2	1.0	1.0	1.74	0.05		
31	2	3			1.64	0.05		
32	3	4			2.00	0.06		
33	4	5			0.89	0.04		
34	5	6			1.02	0.04		
35	6	7			1.21	0.04		
36	7	8			2.08	0.08		
37	8	9			0.91	0.05		
38	9	10			0.25	0.04		
39	10	11			0.08	0.03		
40	11	12			0.03	0.03		
41	12	13			<0.01	0.04		
42	13	14			0.47	0.04		
43	1 4	15			1.53	0.07		
44	15	16			0.94	0.04		
45	16	17			2.32	0.08		
46	17	18			1.66	0.06		
47	18	19			4.40	0.14		
48	19	20			1.12	0.05		
49	20	21			2.26	0.07		
50	21	22			1.43	0.07		
51	22	23			2.25	0.08		
52	23	24			2.65	0.08		
53	24	25			3.80	0.07		
54	25	26			2.69	0.04		
55	26	27			1.77	0.03		
56	27	28			0.98	0.03		
57	28	29			3.20	0.06		
58	29	30			2.30	0.04		
59	30	31			0.32	0.01		
60	31	32			0.35	0.01		
61	32	33			0.46	0.02		
62	33	34			2.13	0.06		
63	34	35			0.37	0.01		
64	35	36			0.49	0.01		
65	36	37			0.44	0.01		
66	37	38			<0.01	<0.01		
67	38	39			<0.01	<0.01		
68	39	40			<0.01	<0.01		
69	40	41			0.05	<0.01		
70	41	42			0.42	0.01		
71	42	43			1.24	0.04		
72	43	44			0.07	<0.01		
73	44	45			0.45	0.02		
74	45	46			<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/18

0.00 - 8.45m(?) **GARNET SKARN -UPPER C LENS**

Coarse grained andradite garnet skarn with fine disseminated scheelite throughout. The unit appears to be disturbed and from 6.15m onwards - possible bedding may be present. (This could suggest that the marble marker may commence somewhere around 6.15m).

Quartz actinolite veins and manner are common throughout.

Core recovery appears to have commenced at 1.0m.

(?)8.45 - 13.75m **MARBLE MARKER**

Marble marker unit consisting of Bh, Ph, grey to white marble and minor grossular garnet. Some scheelite mineralisation is present but not over the full width.

A 2cm clay fault pug zone occurs at 12.85m.

The base of the unit could extend down to 17.75m(?). It's difficult to determine where mineralised marble marker gives way to banded lower C lens.

So 42^{o} to LCA at 9.8m

13.75 - 34.50m **BANDED SKARN - LOWER C LENS**

Well bedded andradite skarn with Ph, Bh and minor marble interbeds. Fine disseminated and coarse scheelite is present throughout (appears to be >1% WO_3).

Fractured, rubbly, clayey and slickensided core occurs around 23.05m (probable fault zone). Minor broken core also occurs around 33m and 33.8 - 34.5m.

So 38^{o} to LCA at 21.0m
So 30^{o} LCA 28.6m
So 38^{o} 32.7m

34.5 - 35.0m **POSSIBLE FAULT**

Possible major fault zone with abundant fractured, clayey and brecciated core. Minor rubble. Actinolite rich crystals appear to be developed in places.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/18

35.0 - 44.65m

BANDED FOOTWALL BEDS

Well bedded BFB consisting of dominantly white marble with minor Bh, Ph, grossular and andradite interbeds. Andradite interbeds are common from 41.0 - 43.0m. Metamorphic reaction zoning is classic.

A 2-3.0m chlorite clay pug zone (major fault) occurs at 36.7m. Numerous other small faults, generally parallel to bedding, are also common - evidenced by slickensided and chlorite surfaces.

Patchy scheelite mineralisation is present but primarily associated with the andradite.

So	35°	to LCA	at	37.8m
So	45°	LCA		41.0m
So	46°	LCA		44.0m

44.65 - 46.70m

BIOTITE HORNFELS/PYROXENE HORNFELS

Fine grained well bedded Bh/Ph with no scheelite mineralisation present.

EOH 46.70m

Note: Hole intersected T13 Cuddy as planned.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/17

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens Wedge Area

PROPOSED CO-ORDS: 220320 E 563975 N

INCLINATION: -15^{o}

BEARING: 0^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 355^{o} 46' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.2 E 563979.8 N

R.L. OF COLLAR: -240.9

INCLINATION OF HOLE: -13^{o} 23'

PICKED UP BY: W. Davies DATE: 29/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 0 - 28m, 28m @ 0.98% WO_3
31-34m, 3m @ 0.72% WO_3

DRILLING

DATE COMMENCED: 15/3/79 DATE TERMINATED: 19/3/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: BQ
DEPTH: 1m

CORE: SIZE: 46TT
DEPTH: 53.9

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 53.9m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed at 53.90

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/17

Surveyed method: Single shot
Final depth: 53.90m
Casing depth: 1.00m

Depth surveyed to: 53.90
Date surveyed: 19/3/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
4	359°	349°	75° 45'	-14° 15'	0.98	3.81	0.74
22	356°	346°	75° 15'	-14° 45'	5.56	20.70	4.95
53.90	359°	349°	74° 15'	-15° 45'	14.22	50.84	10.81

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/17

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.50	3.5	3.5	100
3.5 - 6.0	2.5	2.5	100
6.0 - 9.0	3.0	3.0	100
9.0 - 12.0	3.0	3.0	100
12.0 - 14.9	2.9	2.9	100
14.9 - 17.9	3.0	3.0	100
17.9 - 20.9	3.0	3.0	100
20.9 - 23.9	3.0	3.0	100
23.9 - 25.2	1.3	1.3	100
25.2 - 26.9	1.7	1.7	100
26.9 - 30.2	3.3	3.3	100
30.2 - 32.8	2.6	2.6	100
32.8 - 33.5	0.7	0.7	100
33.5 - 36.35	2.85	2.85	100
36.35 - 36.85	0.5	0.5	100
36.85 - 38.50	1.65	1.65	100
38.50 - 40.50	2.0	2.0	100
40.50 - 41.90	1.4	1.4	100
41.90 - 44.90	3.0	3.0	100
44.90 - 47.90	3.0	3.0	100
47.90 - 50.90	3.0	3.0	100
50.90 - 53.9	3.0	3.0	100
EOH 53.9m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/17

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9878	0	1	1.0	1.0	0.33	0.01		
79	1	2	"	"	0.7	0.01		
80	2	3	"	"	0.50	0.02		
81	3	4	"	"	0.49	0.02		
82	4	5	"	"	1.38	0.06		
83	5	6	"	"	0.92	0.03		
84	6	7	"	"	1.32	0.04		
85	7	8	"	"	1.15	0.03		
86	8	9	"	"	0.92	0.03		
87	9	10	"	"	0.87	0.02		
88	10	11	"	"	0.66	0.01		
89	11	12	"	"	0.08	0.01		
90	12	13	"	"	0.49	0.01		
91	13	14	"	"	0.35	<0.01		
92	14	15	"	"	1.11	0.03		
93	15	16	"	"	1.28	0.03		
94	16	17	"	"	0.84	0.02		
95	17	18	"	"	0.47	0.02		
96	18	19	"	"	0.97	0.02		
97	19	20	"	"	1.00	0.02		
98	20	21	"	"	0.84	0.02		
99	21	22	"	"	6.0	0.02		
9900	22	23	"	"	1.72	0.02		
01	23	24	"	"	0.55	0.02		
02	24	25	"	"	1.95	0.03		
03	25	26	"	"	1.04	0.02		
04	26	27	"	"	0.90	0.03		
05	27	28	"	"	0.52	0.02		
06	28	29	"	"	0.18	0.01		
07	29	30	"	"	0.03	<0.01		
08	30	31	"	"	<0.01	<0.01		
09	31	32	"	"	0.55	0.02		
10	32	33	"	"	0.42	0.02		
11	33	34	"	"	1.20	0.03		
12	34	35	"	"	0.01	0.01		
13	35	36	"	"	0.21	0.02		
14	36	37	"	"	0.59	0.03		
15	37	38	"	"	0.01	0.01		
16	38	39	"	"	<0.01	<0.01		
17	39	40	"	"	0.04	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/17

0.0 - 28.0m BANDED SKARN - LOWER C-LENS

Coarse grained well banded andradite garnet skarn good - high grade disseminated scheelite present throughout.

Towards the base of the unit, minor unreplaced marbles are present and grade inperceptibly into banded footwall beds below.

The following possible fault zones were noted - around 6.0m (rehealed), 24.3 - 24.4m(sheared, clayey and slightly leached.

Bedding 23^{o} to LCA at 4.0m
Bedding 17^{o} 11.0m
Bedding 24^{o} 25.0m

28.0 - 32.95 BANDED FOOTWALL BEDS (Mineralised in part)

Typical Banded footwall beds with unreplaced marbles, interbeds of biotite hornfels and andradite skarn. The skarn contains fine disseminated scheelite.

The white to cream marbles appear to be quite leached, as in places is the andradite skarn.

Bedding 30^{o} to LCA at 29.0m

32.95 - 37.75m BIOTITE HORNFELS/PYROXENE HORNFELS

Well bedded sequence of fine grained biotite hornfels/pyroxene hornfels with rare interbeds of marbles and skarn (ie 35.9 - 36.4m - partly leached). Skarn carries scheelite.

A major fault zone with clay-pug and shearing occurs from 36.85 - 37.0m.

Bedding 34^{o} to LCA at 34.0m

37.75 - 39.30 MARBLES

Mainly white to grey coloured marbles with minor biotite hornfels , grossular and pyroxene hornfels. Bedding is well developed -

Bedding 32^{o} to LCA at 38.85m

39.30 - 53.90 LOWER VOLCANICS

Fine to coarse grained, often spotted (both small (1 mm) and large (4mm)), lower volcanics with no visible scheelite present.

Minor calcite vughs occur around 41.87m. The unit is very competent.

EOH 53.90m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No D 320/16

PLANNING

PROPOSER: G. J. Bujtor DEPTH: 80m

LOCATION: S9 Drill Drive

PURPOSE OF HOLE: Define Southern Orebody

CO-ORDS: 220320 E 563900 N

INCLINATION: -68°

BEARING: 180 °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 177° 07°GRID °MAC

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.4 E 563899.6 N

R.L. OF COLLAR -237.4

INCLINATION OF HOLE -66° 23'

PICKED UP BY: B. Davies DATE: 20/3/79

SUMMARY

LOGGED BY: B. Davies

RESULTS: 24-28m, 4m @ 1.16% WO_3
55-57m, 2m @ 0.71% WO_3

DRILLING

DATE COMMENCED: 16/2/79 DATE TERMINATED: 14/3/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 86m

WEDGE PLACED: Nil DATE:

EXTENSION: Nil

FINAL DEPTH: 86m

REASON FOR TERMINATION: in carb, sulph, adamellite

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/16

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.2	2.2	2.2	100
2.2 - 3.3	1.1	1.1	100
3.3 - 4.5	1.2	1.2	100
4.5 - 6.4	1.9	1.0	53lost core?
6.4 - 9.4	3.0	3.0	100
9.4 - 12.0	2.6	2.6	100
12.0 - 13.7	1.7	1.7	100
13.7 - 15.5	1.8	1.8	100
15.5 - 16.3	0.8	0.8	100 broken
16.3 - 18.2	1.9	1.9	100
18.2 - 21.2	3.0	3.0	100
21.2 - 24.2	3.0	3.0	100
24.2 - 25.5	1.3	1.3	100
25.5 - 27.5	2.0	2.0	100
27.5 - 30.5	3.0	3.0	100
30.5 - 33.5	3.0	3.0	100
33.5 - 36.5	3.0	3.0	100
36.5 - 39.5	3.0	3.0	100
39.5 - 42.3	2.8	2.8	100
42.3 - 45.3	3.0	3.0	100
45.3 - 47.4	2.1	2.1	100
47.4 - 48.5	1.1	1.1	100
48.5 - 51.5	3.0	3.0	100
51.5 - 54.5	3.0	3.0	100
54.5 - 56.0	1.5	1.5	100
56.0 - 59.0	3.0	3.0	100
59.0 - 60.5	1.5	1.75	117
60.5 - 63.5	3.0	3.0	100
63.5 - 66.2	2.7	2.7	100
66.2 - 68.8	2.6	2.8	108
68.8 - 69.1	0.3	0.4	133
69.1 - 71.8	2.7	2.7	100
71.8 - 73.0	1.2	1.2	100
73.0 - 74.2	1.2	1.2	100
74.2 - 75.5	1.3	1.3	100
75.5 - 75.8	0.3	0.3	100
75.8 - 78.0	2.2	2.2	100
78.0 - 79.0	1.0	1.0	100
79.0 - 81.5	2.5	2.5	100
81.5 - 84.5	3.0	3.0	100
84.5 - 86.0	1.5	2.0	133
EOH 86.00m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/16

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9640	23	24	1.0	1.0	<0.01	<0.01		
41	24	25	"	"	0.44	0.01		
42	25	26	"	"	<0.01	<0.01	4 m @	1·16% WO_3
43	26	27	"	"	0.78	0.03		0·04% Mo
44	27	28	"	"	3.4	0.10		
45	28	29	"	"	0.29	0.01		
46	29	30	"	"	<0.01	<0.01		
47	30	31	"	"	<0.01	<0.01		
48	31	32	"	"	<0.01	<0.01		
49	32	33	"	"	<0.01	<0.01		
50	33	34	"	"	<0.01	<0.01		
51	34	35	"	"	0.54	0.02		
52	35	36	"	"	<0.01	<0.01		
53	36	37	"	"	<0.01	<0.01		
54	37	38	"	"	0.07	0.01		
55	38	39	"	"	<0.01	<0.01		
56	39	40	"	"	<0.01	<0.01		
57	40	41	"	"	<0.01	<0.01		
58	41	42	"	"	<0.01	<0.01		
59	42	43	"	"	<0.01	<0.01		
60	43	44	"	"	<0.01	<0.01		
61	44	45	"	"	<0.01	<0.01		
62	45	46	"	"	<0.01	<0.01		
63	46	47	"	"	<0.01	<0.01		
64	47	48	"	"	0.06	<0.01		
65	48	49	"	"	0.20	<0.01		
66	49	50	"	"	2.30	0.06		
67	50	51	"	"	<0.01	<0.01	3m @	1·11% WO_3
68	51	52	"	"	1.02	0.03	&	0·03% Mo
69	52	53	"	"	0.11	<0.01		
70	53	54	"	"	0.22	<0.01		
71	54	55	"	"	0.04	<0.01		
72	55	56	"	"	0.98	0.01	2m @	0·71% WO_3
73	56	57	"	"	0.44	0.01		& 0·01% Mo
74	57	58	"	"	0.16	<0.01		
75	58	59	"	"	<0.01	<0.01		
76	59	60	"	"	<0.01	0.01		
77	60	61	"	"	0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 320/16

DEPTH INTERVAL (METRES)	ROCK TYPE	FRACTURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECOVERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 24.0	Bh	4-8		Chl/sulph/clay carb.			0.75	
24.0 - 36.5	Ph/Tuff/Ch	6-8		Chl/clay/carb sulph			0.71	
36.5 - 45.3	Ch	12		Clay/chl/carb/ sulph			0.63	
45.3 - 55.55	Ch/Ph	4-6		Clay/chl/carb/ sulph			0.86	
55.55 - 55.65	MAJOR FAULT							
55.65 - 57.90	Ph	4-5		Clay/chl/carb/ sulph			0.84	
57.90 - 76.45	Bh	12		Chl/sulph			0.35	
76.45 - 86.0	Ground	3-8		Carb/sulph			0.69	
EOH 86.0m								

FURTHER DATA & REMARKS

1. Deatiled % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/16

0.0 - 24.0m **BIOTITE HORNFELS**

Barren, fine to medium grained, dark brown - light brown - greenish coloured biotite hornfels with minor pyroxene - actinolite alteration bands.

A distinctive, light brownish coloured hornfels occurs from 4m - 10m (? possibly as high as 2.0 - 10m).

Minor epodate occurs around 13.0m. A fine grained aplite dyke occurs from 17.6 - 17.95m.

Broken core occurs around 4.5m (lost core? - 0.9m) 15.8 - 16.3m (possible shear with carbonate and chlorite), around 21.0 - 21.2m (possible rubble, fault zone).

Bedding	53°	to LCA	at 1.0m
Bedding	60°		11.5m
?Bedding	45°		20.2m

2.40 - **B-LENS**

B-lens consisting of the following subdivisions -

24.0 - 28.50 **PYROXENE HORNFELS**

Coarse grained, disturbed pyroxene hornfels with abundant grossular garnet. Minor disseminated and coarse faulted scheelite veins (27.2m) are present. This unit may in fact overlie B-lens and represent only a contact metamorphic zone between B-lens marbles and the overlying biotite hornfels.

Bedding 44° to LCA at 24.2m

28.50 - 32.50 **TUFFITE(?)**

Medium to coarse grained, sulphide rich tuffite(?) which in places appear to have some metamorphic spotting. Chlorite, clay and talc(?) anjoint surfaces are common.

32.50 - 48.47 **MARBLE**

Grey to cream coloured marbles which in places is patchely mineralised.

Frome 36.5 - 43.0m, the core in places is extremely broken and leached with numerous open vughs and cavities. The worst affected segment occurs from 39.5 - 42.5m. Soft cream coloured clay is normal.

Caving of the hole has taken places as evidenced by the rubble fragments with core blocks marked 39.5m, 42.3m and 43.8m, 47.4m.

Bedding is poorly developed -

Bedding	70°	to LCA	at 35.75,
Bedding	81°		38.85m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D320/16

48.47 - 50.90 **SKARN**

Pyroxene rich skarn with andradite and grossular. Vein and disseminated scheelite is present.

50.90 - 53.35 **MARBLE**

Grey to cream coloured marbles with minor splashes of pyroxene, and minor scheelite.

53.35 - 57.90 **PYROXENE HORNFELS**

Green coloured pyroxene hornfels with patches and dissemination of skarn and scheelite. Qartz, carbonate veining and minor sulphides are also present.

This unit is a typical metamorphic reaction zone an a large scale.

57.90 - 76.45 **BIOTITE HORNFELS**

Fine grained dark grey to brown coloured biotite hornfels. From 59.9 - 60.5m, minor andradite skarn with assocated pyroxene hornfels margins is present (orginal lens of marble is shale?). Small white spotting in the biotite hornfels occurs from 62 - 65.2m.

Minor broken core occurs from/around 59.8m, 71.80m, 73.0m, 74.0. No obvious clay pug fault zone were noted.

Contact with granite below is skarp.

?Bedding 45^{o} to LCA at 60.6m
?Bedding 45^{o} 69.8m

76.45 - 86.0 **ADAMELLITE**

Coarse grained pinkish coloured adamillite with abundant white quartz (silicfied in part). No scheelite mineralisation is present.

EOH 86.00m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/15

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S9 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens Wedge Area

PROPOSED CO-ORDS: 220320 E 563900 N

INCLINATION: -45^{o}

BEARING: 0^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 356^{o} $14'^{o}$GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220320.9 E 563900.8 N

R.L. OF COLLAR: -237.4

INCLINATION OF HOLE: -41.49

PICKED UP BY: W. Davies DATE: 20/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Lower C-lens 19-34m, 15m @ 1.46% WO_3
38-41m, 3m @ 0.52% WO_3

DRILLING

DATE COMMENCED: 6/2/79 DATE TERMINATED: 11/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 50m

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 50m

REASON FOR TERMINATION: Lower Volcanics

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/15

Surveyed method: Single shot Camera
Final depth: 50.0m
Casing depth: 1.0m

Depth surveyed to: 50.0m
Date surveyed: 17/2/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
20m	355°	343°	46° 45'	-43° 15'	13.70	14.07	3.77
50m	355°	345°	46° 15'	-43° 45'	34.45	35.00	9.38

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/15

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 4.5	4.5	4.5	100
4.5 - 6.0	1.5	1.5	100
6.0 - 7.6	1.6	1.6	100 broken
7.6 - 7.8	0.2	0.2	100 "
7.8 - 8.0	0.2	0.2	100 "
8.0 - 8.8	0.8	0.8	100 "
8.8 - 9.4	0.6	0.6	0.4 "
9.4 - 9.6	0.2	0.2	0.3 "
9.6 - 10.1	0.5	0.5	100 "
10.1 - 10.7	0.6	0.5	100 "
10.7 - 11.2	0.5	0.5	100 "
11.2 - 11.5	0.3	0.3	100 "
11.5 - 12.6	1.1	1.1	100
12.6 - 13.5	0.9	0.9	100
13.5 - 14.0	0.5	0.5	100
14.0 - 15.0	1.0	1.0	100
15.0 - 18.0	3.0	3.0	100
18.0 - 19.5	1.5	1.5	100 broken
19.5 - 21.5	2.0	2.0	100
21.5 - 24.0	2.5	2.5	100
24.0 - 27.0	3.0	3.0	100
27.0 - 28.7	1.7	1.7	100 broken
26.7 - 29.7	1.0	1.0	100 "
29.7 - 31.2	1.5	1.5	100
31.2 - 33.0	1.8	1.8	100
33.0 - 35.0	2.0	2.0	100
35.0 - 36.0	1.0	1.0	100
36.0 - 39.0	3.0	3.0	100
39.0 - 42.0	3.0	3.0	100 broken
42.0 - 45.0	3.0	3.0	100
45.0 - 48.0	3.0	3.0	100
48.0 - 50.0	2.0	2.0	100
EOH 50.0m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/15

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9352	15	16	1.0.	1.0.	<0.01	0.01		
53	16	17	"	"	0.10	0.01		
54	17	18	"	"	0.43	0.01		
55	18	19	"	"	<0.01	0.01		
56	19	20	"	"	1.94	0.04		
57	20	21	"	"	6.20	0.09		
58	21	22	"	"	2.20	0.03		
59	22	23	"	"	1.50	0.04		
60	23	24	"	"	0.70	0.01		
61	24	25	"	"	1.42	0.01		
62	25	26	"	"	1.44	0.03		
63	26	27	"	"	1.06	0.02		
64	27	28	"	"	2.50	0.03		
65	28	29	"	"	1.00	0.01		
66	29	30	"	"	0.43	0.01		
67	30	31	"	"	0.92	0.01		
68	31	32	"	"	1.22	0.01		
69	32	33	"	"	0.92	0.02		
70	33	34	"	"	0.70	0.01		
71	34	35	"	"	0.06	<0.01		
72	35	36	"	"	0.13	<0.01		
73	36	37	"	"	0.28	0.01		
74	37	38	"	"	0.11	<0.01		
75	38	39	"	"	0.92	0.01		
76	39	40	"	"	0.22	0.01		
77	40	41	"	"	0.41	0.01		
78	41	42	"	"	<0.01	0.01		
79	42	43	"	"	<0.01	<0.01		
80	43	44	"	"	<0.01	<0.01		
81	44	45	"	"	<0.01	0.01		
82	45	46	"	"	0.06	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/15

0.0 - 14.90 **BIOTITE HORNFELS**

Fine to medium grained brown - dark brown/black - grey coloured biotite hornfels with no visible scheelite.

Medium grained brown biotite hornfels occurs from 0.0 - 6.0m. Broken and fractured core is common from 6.0 - 11.5m with micro-faulting and quartz - carbonate veining.

14.90 - 19.10 **PYROXENE HORNFELS** Minor biotite hornfels

Greenish coloured pyroxene hornfels with grossular and andradite as well as minor biotite hornfels. Some scheelite mineralisation is present.

This zone is only a reflection of alteration/mineralisation adjacent to the Wedge Fault zone.

A fault (clay pug) occurs around 16.5m.

19.10 - 19.50 **WEDGE FAULT ZONE**

Broken, fractured and chlorite fault zone with evidence of disturbance in units on either side of the fault.

Minor scheelite is present.

19.50 - 34.15 **BANDED SKARN - LOWER C LENS**

Well bedded/banded lower C-lens skarn with good fine disseminated scheelite throughout. The scheelite appears coarser and of higher grade at the top of the unit closest to the Wedge Fault.

The core is slightly broken and fractured from 28 - 32m. No obvious clay fault zones appear to be present.

Bedding	55°	to	LCA	at 22m
Bedding	57°			23m
Bedding	66°			26m
Bedding	67°			28m
Bedding	66°			30m
Bedding	60°			34m

34.15 - 41.0 **MINERALISED BANDED FOOTWALL BEDS**

Mineralised Banded footwall beds where the top of the unit is taken as the first noted presence of barren/unreplaced marbles. Interbeds of andradite skarn are common and carry all the disseminated scheelite. Minor grossular garnet is present as metamorphic reaction zoning with pyroxene hornfels.

Broken and fractured ground occurs from 39 - 41m, with faulting at 39.4m (2cm clay breccia pug) and 40.4 - 40.6m (clay, breccia and shearing).

Bedding	55°	to	LCA	at 37m
	65			38m
	65			41m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/15

41.0 - 45.6 BANDED FOOTWALL BEDS - UNMINERALISED

Barren Banded footwall beds - unmineralised consisting dominantly of marbles, biotite hornfels, pyroxene hornfels and, minor grossular garnet and pyroxene hornfels.

The top of the unit from 41.0 - 42.0m is slightly broken.

45.6 - 50.0m LOWER VALCANICS

Coarse grained, finely spotted lower volcanics with no visible scheleite present.

EOH 50.0m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/14

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens

PROPOSED CO-ORDS: 220320 E 563975 N

INCLINATION: +51°

BEARING: 180° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 180° 30' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.25 E 563976.31 N

R.L. OF COLLAR: -237.2

INCLINATION OF HOLE: +50°36'

PICKED UP BY: B. Davies DATE:

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Min M/M 3-6m, 3m @ 0.89% WO_3
Upper C 6-32m, 26m @ 1.63% WO_3
Min Pgh 32-37m, 5m @ 0.76% WO_3

DRILLING

DATE COMMENCED: 31/1/79 DATE TERMINATED: 7/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: NQ
DEPTH: 2m

CORE: SIZE: 46TT
DEPTH: 61.00m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 61.00m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING: Stem pipe left in hole

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER: Nil

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/4

Surveyed method: Single shot
Final depth: 59.60m
Casing depth: -

Depth surveyed to: 59.5m
Date surveyed: 19/2/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	E
26.6m	180°	170°	39°15'	+50° 45'	22.92m	18.45	3.25
59.6m	180°	170°	39°45'	+50° 15'	45.98m	37.34	6.58

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/14

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0	2.0	2.0	100
2.0 - 3.4	1.4	1.4	100
3.4 - 5.5	2.1	2.1	100
5.5 - 6.0	0.5	0.75	150
6.0 - 9.0	3.0	3.0	100
9.0 - 12.0	3.0	3.0	100
12.0 - 13.8	1.8	1.8	100
13.8 - 14.4	0.6	0.6	100
14.4 - 17.4	3.0	3.0	100
17.4 - 20.4	3.0	3.0	100
20.4 - 23.4	3.0	3.0	100
23.4 - 26.4	3.0	3.0	100
26.4 - 29.8	3.4	3.0	100
29.8 - 32.10	2.3	2.3	100
32.1 - 32.4	0.3	0.3	100
32.4 - 35.4	3.0	3.0	100
35.4 - 38.4	3.0	3.0	100
38.4 - 41.4	3.0	3.0	100
41.4 - 44.4	3.0	3.0	100
44.4 - 47.0	2.6	2.6	100 broken
47.0 - 50.0	3.0	3.0	100
50.0 - 50.5	0.5	0.5	100
50.5 - 53.0	2.5	2.5	100
53.0 - 54.8	1.8	1.8	100
54.8 - 56.0	1.2	1.2	100
56.0 - 59.2	3.2	3.2	100
59.2 - 59.6	0.4	0.4	100
EOH 59.6m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/14

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9512	0	1	1.0	1.0	0.01	0.01		
13	1	2	"	"	0.20	0.01		
14	2	3	"	"	0.26	<0.01		
15	3	4	"	"	0.66	0.01		
16	4	5	"	"	1.06	0.01		
17	5	6	"	"	0.94	0.01		
18	6	7	"	"	0.92	0.01		
19	7	8	"	"	0.96	0.01		
20	8	9	"	"	3.10	0.03		
21	9	10	"	"	2.32	0.01		
22	10	11	"	"	1.54	0.01		
23	11	12	"	"	0.93	0.01		
24	12	13	"	"	1.40	0.03		
25	13	14	"	"	0.87	0.01		
26	14	15	"	"	2.27	0.05		
27	15	16	"	"	1.66	0.04		
28	16	17	"	"	0.80	0.02		
29	17	18	"	"	1.62	0.04		
30	18	19	"	"	1.10	0.03		
31	19	20	"	"	0.78	0.02		
32	20	21	"	"	1.44	0.04		
33	21	22	"	"	1.68	0.04		
34	22	23	"	"	1.33	0.03		
35	23	24	"	"	1.33	0.03		
36	24	25	"	"	1.30	0.02		
37	25	26	"	"	2.23	0.04		
38	26	27	"	"	1.70	0.03		
39	27	28	"	"	3.00	0.04		
40	28	29	"	"	1.72	0.02		
41	29	30			2.85	0.06		
42	30	31	"	"	0.97	0.01		
43	31	32	"	"	2.51	0.04		
44	32	33	"	"	1.50	0.02		
45	33	34	"	"	0.26	0.01		
46	34	35	"	"	0.63	0.01		
47	35	36	"	"	0.28	0.01		
48	36	37	"	"	1.14	0.02		
49	37	38	"	"	0.14	<0.01		
50	38	39	"	"	0.19	0.01		
51	39	40	"	"	0.05	0.01		
52	40	41	"	"	0.03	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/14

0.0 - 5.90 MARBLE MARKER - Mineralised

Typical marble marker consisting of pyroxene hornfels (0.0 - 2.5m - unmineralised), grossular garnet and andradite garnet and rare marble. The unit appears to grade into Upper C-lens skarn below.

Bedding 35^{o} to LCA at 3.40m
Bedding (?) 23^{o} 5.70m

5.90 - 32.00 ANDRADITE SKARN UPPER C-LENS

Coarse grained, well mineralised andradite garnet skarn with minor carbonate/chlorite veining.

Broken core occurs from 26.4 - 32.0m with the worst occurring 29.35m (clay garnet pug - probably fault). Minor leached garnet occurs around 24.85m.

32.00 - 39.15 PYROXENE GARNET HORNFELS

Typical patchily mineralised Pyroxene garnet hornfels with few massive unreplaced carbonate pods/fragments. Most have been altered as has the groundmass material to a pyroxene grossular rock with minor andradite. Scheelite mineralisation is patchly throughout.

39.15 - 59.60 BIOTITE HORNFELS

Fine to medium grained biotite hornfels with no scheelite mineralisation present.

MAJOR FAULTS occur at 39.35 - 39.40m (5cm of sheared chlorite-clay pug), and 49.5m (1-2cm of chloritic pug). Badly broken core also occurs from 48 - 50m. It is difficult to determine which is the Wedge Fault zone, but the zone at 49.5 is forwared(?).

Intrusive aplite dykes occur from 41.1 - 42.4m.

The light brownish coloured biotite hornfels from 51.7 - 56.0m, is similar to that is holes D 320/16 (4-10m). This unit is definitely known to occur on the Southern side of the Wedge Fault, overlying B-lens of the Southern Orebody.

EOH 59.60m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/13

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S9 Diamond Drill Drive

PURPOSE OF HOLE: To Provide Cover for S9 Drill Drive and Locate the Decline Fault

CO-ORDS: 220320 E 563900 N

INCLINATION: 0^{o}

BEARING: 90^{o} ^{o}GRID ^{o}MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 89^{o} 02' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220322.9 E 563900.1 N

R.L. OF COLLAR -237.3

INCLINATION OF HOLE -0^{o} 01'

PICKED UP BY: B. Davies DATE: 26/1/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Fault zones 9.5 - 11.7m NOT SPLIT
13.4 - 14.3m

DRILLING

DATE COMMENCED: 20/1/79 DATE TERMINATED: 6/2/79

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE: HQ
DEPTH: 2m

CORE: SIZE: 56TT
DEPTH: 35m

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 35.0m

REASON FOR TERMINATION: Tested Proposed Drive Sufficiently

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed to 35m

WATER: Flow Recorded 9.5 - 11.7m (Fault zone) and possibly around 18m.

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/13

Survey method: Singleshot
Final depth: 35m
Casing depth: 2.0m

Depth surveyed to: 35m
Date surveyed: 6/2/79
Surveyed by: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
0	89	79	90	0	0	0	0
5	86	76	90	0	0	1.21	4.85
35	86	76	90	0	0	8.47	33.96
EOH							

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/13

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.80	1.80	1.80	100
1.80 - 2.70	0.90	0.90	100
2.70 - 3.80	1.10	1.10	100
3.80 - 5.30	1.50	1.50	100
5.30 - 6.80	1.50	1.50	100
6.80 - 7.10	0.30	0.30	100
7.10 - 8.00	0.90	0.90	100
8.00 - 8.50	0.5	0.5	100
8.50 - 8.90	0.4	0.4	100
8.90 - 9.30	0.4	0.4	100
9.30 - 10.50	1.2	0.7	58
10.50 - 11.00	0.5	0.5	100
11.00 - 11.60	0.6	0.6	100
11.60 - 12.10	0.5	0.5	100
12.10 - 13.20	1.2	1.2	100
13.20 - 13.80	0.6	0.4	66
13.80 - 14.00	0.2	0.2	100
14.00 - 15.00	1.0	0.9	90
15.00 - 16.00	1.0	1.50	150
16.00 - 17.00	1.0	1.50	150
17.00 - 18.40	1.4	1.4	100
18.40 - 18.90	0.5	0.6	120
18.90 - 19.40	0.5	0.3	60
19.40 - 19.80	0.4	0.4	100
19.80 - 20.30	0.5	0.5	100
20.30 - 20.50	0.2	0.2	100
20.50 - 21.10	0.6	0.5	83
21.10 - 21.50	0.4	0.4	100
21.50 - 21.90	0.4	0.4	100
21.90 - 22.20	0.3	0.2	67
22.20 - 23.00	0.8	0.4	50
23.00 - 23.70	0.7	0.8	114
23.70 - 24.20	0.5	0.5	100
24.20 - 24.80	0.6	0.6	100
24.80 - 25.20	0.4	0.4	100
25.20 - 25.60	0.4	0.5	125
25.60 - 26.20	0.6	0.3	50
26.20 - 27.00	0.8	0.8	100
27.00 - 27.20	0.2	0.35	175
27.20 - 27.70	0.5	0.2	40
27.70 - 28.40	0.7	0.8	114
28.40 - 29.50	1.10	0.9	82
29.50 - 29.90	0.4	0.4	100
29.90 - 30.30	0.4	0.4	100
30.30 - 31.10	0.8	0.8	100
31.10 - 32.50	1.4	1.4	100
32.50 - 35.00	2.5	2.5	100
EOH 35.0m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 320/13

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 8.5	Bh	7-8		Chl/clay/carb/ sulph.		100	51	
8.5 - 11.70	FAULT ZONE							
11.70 - 13.40	Bh	15		Chl/clay/sulph/ carb.		85	31	
13.40 - 14.3	FAULT ZONE							
14.3 - 25.6	Bh	15-20		Clay/chl/sulph/ carb		95	27	
25.6 - 35.0	Bh	7-15		Chl/clay/sulph/ carb.		99	36	
EOH 35.0m								

FURTHER DATA & REMARKS

1. Deatiled % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 46TT

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D320/13

0.0 - 9.5m **BIOTITE HORNFELS**

Fine grained grey to brown coloured Biotite Hornfels. The core becomes increasingly broken from 7m onwards towards the fault below. No scheelite mineralisation is present.

9.50 - 11.70m **FAULT ZONE**

Brecciated, broken and fractured fault zone with very little core loss. The core is incompetent. Some open vughs and cavitites are present. The rock type is Biotite Hornfels. Minor water flow recorded 30gph.

11.70 - 13.70m **BIOTITE HORNFELS**

Fine grained, somewhat fractured biotite hornfels - a zone between two faults. Chlorite is common.

13.40 - 14.3m **FAULT ZONE**

Brecciated, broken fractured fault zone with numerous open vughs and cavities.

14.70 - 35.0m **BIOTITE HORNFELS**

Badly fractured and broken biotite hornfels with abandent rubble and no scheelite. Carbonate coated vughs and fractures occurs around 18.0m (H_2O flow (?)). Minor green pyroxene alteration zones and patches are also present.

EOH 35.0m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/12

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: Oreblocking Wedge Area

PROPOSED CO-ORDS: 220320 E 563975 N

INCLINATION: +42.5

BEARING: 0° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0° 29' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.2 E 563976.3 N

R.L. OF COLLAR: -237.2

INCLINATION OF HOLE: +50 36'

PICKED UP BY: W. Davies DATE: 29/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 6-57m, 51m @ 1·46%, 0·06% Upper C-lens.
63-67m, 4m @ 0·78%, 0·03%. " " "

DRILLING

DATE COMMENCED: 30/2/79 DATE TERMINATED: 13/3/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 80.80

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 80.80m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0m	2.0	2.0	100
2.0 - 5.0	3.0	3.0	100
5.0 - 8.0	3.0	3.0	100
8.0 - 11.0	3.0	3.0	100
11.0 - 14.0	3.0	3.0	100
14.0 - 17.0	3.0	3.0	100
17.0 - 20.0	3.0	3.0	100
20.0 - 23.0	3.0	3.0	100
23.0 - 26.0	3.0	3.0	100
26.0 - 29.0	3.0	3.0	100
29.0 - 32.0	3.0	3.0	100
32.0 - 35.0	3.0	3.0	100
35.0 - 38.0	3.0	3.0	100
28.0 - 41.0	3.0	3.0	100
41.0 - 44.0	3.0	3.0	100
44.0 - 47.0	3.0	3.0	100
47.0 - 50.0	3.0	3.0	100
50.0 - 53.0	3.0	3.0	100
53.0 - 56.0	3.0	3.0	100
56.0 - 59.0	3.0	3.0	100
59.0 - 62.0	3.0	3.0	100
62.0 - 65.1	3.1	3.1	100
65.1 - 68.1	3.0	3.0	100
68.1 - 71.1	3.0	3.0	100
71.1 - 74.1	3.0	3.0	100
74.1 - 77.1	3.0	3.0	100
77.1 - 79.0	1.9	1.9	100
79.0 - 80.80	1.8	1.2	67
EOH 80.80m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/12

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 10676	0	1	1.0	1.0	<0.01	<0.01		
77	1	2	"	"	<0.01	<0.01		
78	2	3	"	"	0.06	<0.01		
79	3	4	"	"	<0.01	<0.01		
80	4	5	"	"	<0.01	<0.01		
81	5	6	"	"	0.04	<0.01		
82	6	7	"	"	2.32	0.07		
83	7	8	"	"	0.83	0.02		
84	8	9	"	"	0.59	0.02		
85	9	10	"	"	1.87	0.05		
86	10	11	"	"	1.60	0.05		
87	11	12	"	"	1.13	0.05		
88	12	13	"	"	0.92	0.04		
86	13	14	"	"	0.84	0.03		
90	14	15	"	"	1.69	0.07		
91	15	16	"	"	2.41	0.10		
92	16	17	"	"	1.36	0.07		
93	17	18	"	"	0.63	0.03		
94	18	19	"	"	0.76	0.05		
95	19	20	"	"	1.26	0.05		
96	20	21	"	"	1.39	0.06		
97	21	22	"	"	1.26	0.06	51 m @ 1·46% WO_3	
98	22	23	"	"	1.47	0.07	and 0·06% Mo.	
99	23	24	"	"	1.30	0.06		
10700	24	25	"	"	1.27	0.02		
01	25	26	"	"	1.14	0.02		
02	26	27	"	"	1.13	0.03		
03	27	28	"	"	1.17	0.03		
04	28	29	"	"	0.81	0.06		
05	29	30	"	"	0.71	0.01		
06	30	31	"	"	1.33	0.03		
07	31	32	"	"	1.17	0.03		
08	32	33	"	"	1.94	0.05		
09	33	34	"	"	0.88	0.01		
10	34	35	"	"	1.08	0.01		
11	35	36	"	"	1.71	0.05		
12	36	37	"	"	1.75	0.05		
13	37	38	"	"	1.28	0.01		
14	38	39	"	"	2.39	0.06		
15	39	40	"	"	2.19	0.02		
16	40	41	"	"	3.97	0.05		
17	41	42	"	"	3.54	0.11		
18	42	43	"	"	1.46	0.08		
19	43	44	"	"	4.6	0.18	truncated to 4% WO_3	
20	44	45	"	"	0.22	0.01		
21	45	46	"	"	0.01	<0.01		
22	46	47	"	"	0.39	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/12

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 10723	47	48	1.0	1.0	0.20	0.01		
24	48	49	"	"	2.00	0.08		
25	49	50	"	"	0.08	0.01		
26	50	51	"	"	2.45	0.08		
27	51	52	"	"	~~9.50~~	0.36	truncated	
28	52	53	"	"	~~6.30~~	0.34	to 4% WO_3.	
29	53	54	"	"	1.35	0.04		
30	54	55	"	"	0.36	0.01		
31	55	56	"	"	0.03	0.01		
32	56	57	"	"	0.83	0.03		
33	57	58	"	"	0.02	<0.01		
34	58	59	"	"	0.08	<0.01		
35	59	60	"	"	0.18	0.01		
36	60	61	"	"	0.10	0.01		
37	61	62	"	"	<0.01	<0.01		
38	62	63	"	"	<0.01	<0.01		
39	63	64	"	"	0.95	0.05		
40	64	65	"	"	1.32	0.05	4 m @	0.73% WO_3
41	65	66	"	"	0.33	0.01	&	0.03% Mo
42	66	67	"	"	0.32	0.02		
43	67	68	"	"	0.01	<0.01		
44	68	69	"	"	0.06	0.01		
45	69	70	"	"	<0.01	0.01		
46	70	71	"	"	<0.01	0.01		
47	71	72	"	"	<0.01	0.01		
48	72	73	"	"	<0.01	0.01		
49	73	74	"	"	0.03	0.01		
50	74	75	"	"	<0.01	0.01		
21	75	76	"	"	0.22	0.01		
22	76	77	"	"	<0.01	0.01		
23	77	78	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/12

0.0 - ?5.50m MARBLE MARKER

Broken and fractured marble marker unit consisting of pyroxene hornfels, biotite hornfels, marble, grossular garnet and rare scheelite.

Difficult to define exact base of unit, as the top 2.5m of Upper C-lens contains pyroxene hornfels and could in fact be mineralised marble marker.

Bedding 30^{o} to LCA at 0.7m
Bedding 33^{o} 3.6m

?5.50 - 42.40 UPPER C-LENS - ANDRADITE SKARN

Typical coarse grained andradite garnet skarn with good - high grade disseminate scheelite present throughout.

Possible fractures/?faults occur at 15.45m, 23.65m, 29.0m, 37.0m. These are represented by carbonate reining and are dominantly 40^{o} to LCA.

The hangingwall contact with pyroxene garnet hornfels above is extremely broken and fractured and no doubt will constitute bad grained conditions during mining.

42.40 - 78.30 PYROXENE GARNET HORNFELS

Typical pyroxene garnet hornfels with abundant calcite pods and fragments in a matrix of pyroxene hornfels (where patchily mineralised) and biotite hornfels (poor to rare scheelite). The pods are often completely replaced by grossular.

Scheelite mineralisation is patchy throughout and is mainly coarse scheelite, often in veins (ie around 51 - 52m).

Biotite hornfels with no pods present occurs from 66 - 68m. From 68.0 - 78.30m, the matrix is mainly biotite hornfels with rare scheelite (below cut-off of 0.3% WO_3). Pods are present with grossular and pyroxene reaction rims.

The contact with Upper C-lens is broken and fractured.

Possible fractures/faults occur at 48.6m, 53.45m (clay pug), 69.4m (clay - pug).

Shearing increases on approaching the Decline Fault zone.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/12

78.30 - 80.80m DECLINE FAULT ZONE

Badly broken, fractured, clayey brecciated fault zone (mainly biotite hornfels).

Fault contact with pyroxene garnet hornfels appears to be at 20^{o} to LCA.

EOH 80.80m

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/12

Surveyed method: Single shot
Final depth: 80.80m
Casing depth: 1m

Depth surveyed to: 80.80m
Date surveyed: 14/3/79
Surveyed by: R.J.S.P.
Checked by: L. Denby

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
20.00	359°	349°	48°	+42°	13.38	14.59	2.84
50.00	360	250	49	+41	33.06	36.89	6.77
80.80	001	351	49	+41	53.27	59.84	10.40

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/11

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens

PROPOSED CO-ORDS: 220320 E 563980 N

INCLINATION: +80

BEARING: 0^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0^{o} 40' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220320.6 E 563977.3 N

R.L. OF COLLAR: -237.2

INCLINATION OF HOLE: $+79^{o}$ 40'

PICKED UP BY: W. Davies DATE: 15/5/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 2-6m 4m @ 0.72% WO_3 Marble Maker

6-29m 23m @ 1.82% WO_3 Upper C

DRILLING

DATE COMMENCED: 20/12/78 DATE TERMINATED: 21/12/78

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 31m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 31m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/11

Surveyed method: Single shot
Final depth: 61.0m
Casing depth: Nil - Up Hole

Depth surveyed to: 61m
Date surveyed: 7/2/79
Surveyed by: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
0		3			0	0	0
31	335	325	10	+80	30.53	4.41	3.09
61	335	325	10	+80	60.07	8.68	6.08

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/11

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0	2.0	2.0	100
2.0 - 3.5	1.5	1.5	100
3.5 - 6.5	3.0	3.0	100
6.5 - 9.5	3.0	3.0	100
9.5 - 12.5	3.0	3.0	100
12.5 - 15.5	3.0	3.0	100
15.5 - 18.3	2.7	2.7	100
18.3 - 21.3	3.0	3.0	100
21.3 - 24.3	3.0	3.0	100
24.3 - 27.3	3.0	3.0	100
27.3 - 30.3	3.0	3.0	100
30.3 - 33.9	2.9	2.9	100
33.9 - 36.7	2.8	2.8	100
36.7 - 40.0	3.3	3.3	100
40.0 - 43.0	3.0	3.0	100
43.0 - 46.0	3.0	3.0	100
46.0 - 49.0	3.0	3.0	100
49.0 - 52.0	3.0	3.0	100
52.0 - 55.0	3.0	3.0	100
55.0 - 58.0	3.0	3.0	100
58.0 - 61.0	3.0	3.0	100
EOH 61.0m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/11

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T./ L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 6.0	M/M	4-10		chl/carb/sulph	35°: 3.5m 40°: 5.4	100	78	
6.0 - 24.5	Gh	4-5		Chl/carb		100	86	
24.5 - 28.5	Gh	3-4		Chl/carb		100	91	
28.5 - 39.5	Pgh	5		Chl/carb/sulph		100	86	
39.5 - 49.0	Pgh	6-9		Chl/clay/carb		100	78	
49.0 - 60.4	Ph-Gross	5-15		Chl/clay/carb/cal		100	70	
60.4 - 61.0	D E C L I N E		F A U	L T Z O N E.				
EOH 61.0								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size. 46TT

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/11

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length Rec.	ELEMENTS WO_3	Mo		COMMENTS
D 9297	2	3	1.0	1.0	1.20	0.10		
98	3	4	"	"	0.66	<0.01	M/M	2-6m
99	4	5	"	"	0.35	<0.01		4m @ 0.72%WO_3
9300	5	6	"	"	0.66	<0.01		
01	7	7	"	"	0.64	<0.01		
02	7	8	"	"	1.01	<0.01		
03	8	9	"	"	2.15	<0.01		
04	9	10	"	"	1.36	<0.01		
05	10	11	"	"	1.68	<0.01		
06	11	12	"	"	1.70	<0.01		
07	12	13	"	"	1.91	0.01		
08	13	14	"	"	1.20	0.01		
09	14	15	"	"	1.63	0.01		
10	15	16	"	"	2.28	0.03		
11	16	17	"	"	2.10	0.03		Upper C-lens
12	17	18	"	"	2.93	0.03		6-29m, 23m @ 1.82%
13	18	19	"	"	1.32	<0.01		WO_3
14	19	20	"	"	0.75	<0.01		
15	20	21	"	"	1.31	<0.01		
16	21	22	"	"	1.42	<0.01		
17	22	23	"	"	1.39	<0.01		
18	23	24	"	"	1.19	<0.01		
19	24	25	"	"	1.18	<0.01		
20	25	26	"	"	2.31	<0.01		
21	26	27	"	"	2.48	<0.01		
22	27	28	"	"	4.7	0.03		
23	28	29	"	"	4.4	0.03		
24	29	30	"	"	7.2	0.07		
25	30	31	"	"	0.31	<0.01		
26	31	32	"	"	0.18	<0.01		
27	32	33	"	"	0.18	<0.01		
28	33	34	"	"	0.63	<0.01		
29	34	35	"	"	0.27	<0.01		
30	35	36	"	"	1.60	0.01		
31	36	37	"	"	1.27	<0.01		
32	37	38	"	"	0.32	<0.01		
33	38	39	"	"	1.17	<0.01		
9401	39	40	"	"	0.06	0.01		
01	40	41	"	"	0.01	<0.01		
03	41	42	"	"	0.01	<0.01		
04	42	43	"	"	0.04	<0.01		
05	43w	44	"	"	0.22	0.01		
06	44	45	"	"	0.35	0.01		
07	45	46	"	"	3.80	0.06		
08	46	47	"	"	1.99	0.03		
09	47	48	"	"	0.14	<0.01		
10	48	49	"	"	0.26	0.03		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/11

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9410	48	49^	1.0	1.0	0.26	0.03		
11	49	50	"	"	2.05	0.04		
12	50	51	"	"	0.28	0.01		
13	51	52	"	"	0.35	0.02		
14	52	53	"	"	0.09	0.01		
15	53	54	"	"	1.54	0.03		
16	54	55	"	"	2.95	0.05		
17	55	56	"	"	0.24	0.01		
18	56	57	"	"	4.3	0.08		
19	57	58	"	"	0.41	0.01		
20	58	59	"	"	2.53	0.04		
21	59	60	"	"	0.05	0.01		
22	60	61	"	"	0.03	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/11

0.0 - 6.0?m **MARBLE MARKER**

Marble marker horizon consisting of mainly greenish pyroxene hornfels, minor biotite hornfels and some marble.

The 'base' of the unit is difficult to determine exactly - grades imperceptibly into Upper C-lens skarn. The 'base' could be as low as 7.5m.

Minor disseminated scheelite is present.

Bedding 35^{o} to LCA at 3.5m
Bedding 40^{o} 5.4m

?6.0 - 28.85? **GARNET SKARN - UPPER C-LENS**

Coarse grained andradite garnet skarn with good disseminated scheelite present throughout. The core appears very competent.

Minor fault pug and breccia occurs around 17.15m, 19.70m.

The base of the unit (actual top on X-Section) may extend to 30m, as the skarn appears to grade into mineralised pyroxene garnet hornfels below. Disseminated scheelite mineralisation extends down to 30.0m

?28.85 - 49.0? **PYROXENE GARNET HORNFELS**

Typical pyroxene garnet hornfels with numerous calcite pods and fragments throughout. Patchly coarse scheelite is also present.

The base of the unit is taken where calcite pods and fragments are no longer recogniseable, and gives way to a pyroxene - grossular rich rock below (associated with Decline Fault zone).

Possible fault zones with chlorite and clay pug occurs around 40m, around 41m, and 44.7m.

?49.0 - 60.40 **PYROXENE - GROSSULAR**

Rock with chlorite carbonate and quartz. A pyroxene-grossular rock (some mottled texture) with abundant chlorite, quartz, calcite and minor coarse scheelite (in places will go grade, although only low grade).

The rock type is that typically found in accociation with fault-zone.

The core becomes increasingly broken and faulted towards the base of the unit ie approaching the Decline Fault zone.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/11

60.4 - 61.0m DECLINE FAULT ZONE

Badly broken, fractured, chlorite, brecciated core with abundant slickensides. No scheelite mineralisation is present.

EOH 61.0m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 320/10

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S13 Diamond Drill Drive

PURPOSE OF HOLE: To Define C-lens

CO-ORDS: 220320 E 564065 N

INCLINATION: -47

BEARING: 0^{o} ^{o}GRID ^{o}MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 1^{o} 51' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220318.1 E 564067.3 N

R.L. OF COLLAR -203.1

INCLINATION OF HOLE -46^{o} 00'

PICKED UP BY: B. Davies DATE: 5/7/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 0-50m, 50m @ 1.30% WO_3

DRILLING

DATE COMMENCED: 11/1/79 DATE TERMINATED: 24/1/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 79.4

WEDGE PLACED: Nil DATE:

EXTENSION: Nil

FINAL DEPTH: 79.40m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot to 79.40

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 230/10

Survey method: Singleshot
Final depth: 80.0m
Casing depth: 1m

Depth surveyed to: 80.0m
Date surveyed: 25/1/79
Surveyed by: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read.	Corrected		N	W
0					0	0	0
20	0	350	43	-47	14.63	13.43	2.37
50	1	351	42.75	-47.25	36.66	33.54	5.55
80	0	350	42.25	-47.25	58.87	53.40	9.05

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 320/10

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.21	2.21	3.35	152
2.21 - 8.70	6.49	5.35	82
8.70 - 11.0	2.3	2.3	100
11.0 - 13.88	2.88	2.88	100
13.88 - 16.05	2.17	1.7	78
16.05 - 19.11	3.06	2.3	75
19.11 - 20.92	1.81	2.8	155
20.92 - 22.23	1.31	1.31	100
22.23 - 23.83	1.6	1.6	100
23.83 - 26.0	2.17	2.17	100
26.0 - 27.55	1.55	0.5	32 Core loss
27.55 - 29.45	1.90	1.90	100
29.45 - 30.86	1.41	1.41	100
30.86 - 33.0	2.14	2.0	93
33.0 - 35.6	2.60	2.3	88
35.60 - 36.63	1.03	1.03	100
36.63 - 37.26	0.63	0.4	63
37.26 - 38.84	1.58	1.58	100
38.84 - 43.07	4.23	4.23	100
43.07 - 44.76	1.69	1.69	100
44.76 - 45.66	0.90	0.8	89
45.66 - 46.46	0.80	0.80	100
46.46 - 47.28	0.82	2.0	244
47.28 - 50.24	2.96	2.0	106
50.24 - 53.20	2.96	2.96	100
53.20 - 56.18	2.98	2.98	100
56.18 - 56.75	0.57	0.7	123
56.75 - 59.53	2.78	2.78	100
59.53 - 59.84	0.31	0.4	129
59.84 - 62.73	2.89	2.89	100
62.73 - 65.70	2.97	2.97	100
65.70 - 68,63	2.93	2.93	100
68.63 - 71.37	2.74	2.74	100
71.73 - 72.58	0.85	1.2	141
72.58 - 73.47	0.89	0.89	100
73.47 - 76.43	2.96	2.96	100
76.43 - 77.58	1.15	1.15	100
77.58 - 77.99	0.41	0.5	122
77.99 - 78.97	0.98	0.98	100
78.97 - 79.40	0.43	0.43	100
79.40 - 80.0	0.60	0.60	100
EOH 80m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. 320/10

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 21.85	Gh	8-9		Clay/chl/cal	62°: 10.45m 30°: 17.15m	95	63	
21.85 - 26.3	Gh	8		Clay/chl/cal		100	73	
26.3 - 44.2	Ph/Gh	12		Clay/chl/cal	17°: 27.5m 52°: 36.2m 57°: 39.2m	97	47	
44.2 - 50.5	Bh/Ph	12-15		Clay/chl/carb.	65°: 46m 50°: 49.6m	100	52	
50.5 - 56.75	LV	4-5		Chl/clay		100	65	
56.75 - 68.0	Bh/Ph	8		Chl/clay/carb.	Chl,clay	100	72	
68.0 - 73.5	N O R T	H E R N	B O	U N D A R Y	F A U L T	Z O N	E	
73.5 - 80.0	Qtzite	10->20		Chl/clay/carb.		100	42	
EOH 80.0 m								

FURTHER DATA & REMARKS

1. Deatiled % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 46TT

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/10

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9140	0	1	1.0	1.0	1.20	0.02		
41	1	2	"	"	1.18	0.01		
42	2	3	"	"	1.10	0.01		
43	3	4	"	"	2.29	0.03		
44	4	5	"	"	0.07	0.01		
45	5	6	"	"	1.18	0.45		
46	6	7	"	"	1.75	0.06		
47	7	8	"	"	0.66	0.04		
48	8	9	"	"	1.66	0.05		
49	9	10	"	"	3.00	0.08		
50	10	11	"	"	1.45	0.05		
51	11	12	"	"	1.35	0.02		
52	12	13	"	"	1.31	0.02		
53	13	14	"	"	1.14	0.02		
54	14	15	"	"	0.49	0.01		
55	15	16	"	"	1.30	0.02		
56	16	17	"	"	1.19	0.04		
57	17	18	"	"	1.13	0.27		
58	18	19	"	"	1.20	0.04		
59	19	20	"	"	0.53	0.01		
60	20	21	"	"	1.20	0.01		
61	21	22	"	"	0.49	0.01		
62	22	23	"	"	0.68	0.01		
63	23	24	"	"	1.10	0.02		
64	24	25	"	"	0.98	0.05		
65	25	26	"	"	1.11	0.03		
66	26	27	"	"	1.24	0.05		
67	27	28	"	"	0.35	0.02		
68	28	29	"	"	4.2	0.09		
69	29	30	"	"	1.75	0.26		
70	30	31	"	"	0.66	0.02		
71	31	32	"	"	<0.01	0.01		
72	32	33	"	"	0.25	0.02		
73	33	34	"	"	2.95	0.08		
74	34	35	"	"	5.10	0.18		
75	35	36	"	"	1.04	0.03		
76	36	37	"	"	0.94	0.03		
77	37	38	"	"	4.40	0.08		
78	38	39	"	"	2.97	0.06		
79	39	40	"	"	1.98	0.04		
80	40	41	"	"	1.17	0.01		
81	41	42	"	"	0.35	0.01		
82	42	43	"	"	1.90	0.04		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 320/10

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9183	43	44	1.0	1.0	0.68	0.01		
84	44	45	"	"	0.10	0.01		
85	45	46	"	"	<0.01	0.01		
86	46	47	"	"	0.92	0.03		
87	47	48	"	"	1.08	0.02		
88	48	49	"	"	1.40	0.08		
89	49	50	"	"	0.41	0.05		
90	50	51	"	"	0.08	0.05		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D ~~230~~ 320/10

0.0 - ?4.35m UPPER C-LENS GARNET SKARN

Coarse grained andradite garnet skarn with some disseminated scheelite present. The core appears somewhat disturbed with minor quartz-carbonate veining.

?4.35 - ?7.75 PYROXENE AND BIOTITE HORNFELS

Disturbed and poorly mineralised Biotite hornfels and Pyroxene hornfels with minor carbonate and rare skarn. The unit is not typical interbedded Biotite hornfels/ Pyroxene hornfels.

?7.75 - 21.85 ANDRADITE SKARN - PARTLY BEDDED

Disturbed and partly leached skarn with bedding developed is places. Disseminated scheelite occurs thoughout.

Although some bedding appears to be developed, the unit appears some what too massive for Lower C-lens! Carbonate veining is common as is some leached Garnet hornfels around 14.16m (some rubble present).

Major Fault appears to be present around 19.0m where clayey, pug, breccia material is present.

So (?)62° to LCA at 10.45m
So 30° 17.15m

21.85 - ?22.23 BIOTITE HORNFELS

Broken and fractured Bh which could be an interbed in Lower C-lens.

?22.23 - 26.30m ANDRADITE SKARN

Medium to coarse grained andraite skarn with possible minor bedding present. From 23.0 - 23.83m the core is some what broken.

26.30 - 44.20m PYROXENE SKARN

Pyroxene rich-skarn like rock with both fine and coarse scheelite present. Coarse scheelite is present from 33m onwards.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 320/10

The unit is very much disturbed and could well be banded footwall beds grading into Biotite hornfels/pyroxene hornfels below (towards base of the unit). The core is generally broken and fractured. It definitely forms part of Lower C-lens.

A major fault with clay-pug occurs around 41.5m, with evidence of smaller fault/shears thoughout the core.

Bedding	17^{o}	to	LCA at	27.55m
Bedding	52^{o}			36.15
Bedding	57^{o}			39.15

44.20 - 50.50m BIOTITE HORNFELS - PYROXENE HORNFELS

Fine grained interbedded Biotite hornfels/pyroxene hornfels with minor pyroxene - marble - grossular - andradite interbeds, the largest occurring from 47.8 - 49.5m.

The core is quite fractured and broken.

Bedding	65^{o}	to	LCA at	46m
Bedding	50^{o}			49m

50.50 - 56.75 LOWER VOLCANICS

Typical coarse grained spotted lower volcanic with no visible scheelite present.

56.75 - ?68.0 BIOTITE HORNFELS - PYROXENE HORNFELS

Fine grianed interbedded Biotite hornfels/Pyroxene hornfels with possibly some lower volcanic intrusives (65.45 - 66.25m).

The contact with Lower volcanic above is broken and fractured. Broken and fractured core also occurs around 59 - 60m.

Bedding	55^{o}	to	LCA at	59.84m
	57^{o}			61.80m

?68.0 - 73.50? NORTHERN BOUNDARY FAULT ZONE

Broken, fractured, disturbed and sheared zone probably associated with the Northern Boundary Fault Zone, but the exact position of the fault is difficult to identify. Slikensides and shearing together with abundant chlorite is connom.

The core in places is quite course grained and appears somewhat like spotted volcanics. Numerous weathered aplite is alos present.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOICAL LOG

D.D.H. No. D 320/10

?73.50 - 80.0m QUARTZITES

Grey coloured, siliceous quartzites which are somewhat broken and fractured. The top 2cm of the unit appears to be very disturbed and looks like volcanics (?). No scheelite mineralisation is present.

EOH 80.0m

Fil 2

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. D 320/9A

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: To define C lens and locate Decline Fault at depth.

CO-ORDS: 220320 E N

INCLINATION: -41°

BEARING: 90° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 93°29' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220321.2 E 563975.6 N

R.L. OF COLLAR: -241.5

INCLINATION OF HOLE: -41° 36'

PICKED UP BY: B. Davies DATE: 19-12-78

SUMMARY

LOGGED BY: G. Bujtor

RESULTS: mineralised Marble Marker 24-50m, 26m @ 1.21% WO_3

DRILLING

DATE COMMENCED: 27-10-78 DATE TERMINATED: 16-11-78

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE: NQ
DEPTH: 30m

CORE: SIZE: BQ
DEPTH: 53.0 m

WEDGE PLACED: DEPTH:

EXTENSION: N11

FINAL DEPTH: 53.00 m

REASON FOR TERMINATION: Successfully tested C lens and Decline Fault zone.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed to 53.0 m.

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/9A

Survey method: Singleshot
Final depth: 53.00 m
Casing depth: 30.00 m

Depth surveyed to: 53.0 m
Date surveyed 16-11-78
Surveyed by: Lance Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
0	93.5	83.5		-41.5	0	0	0
33	95	85	48.75	-41.25	21.76	2.16	24.72
53	96	86	48.25	-41.75	35.08	3.20	39.60

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/9A

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.0	3.0	3.0	100
3.0 - 3.3	0.3	0.3	100
3.3 - 5.0	1.7	1.7	100
5.0 - 8.0	3.0	3.0	100
8.0 - 11.0	3.0	3.0	100 broken
11.0 - 14.0	3.0	3.0	100
14.0 - 17.0	3.0	3.0	100
17.0 - 20.0	3.0	3.0	100
20.0 - 21.9	1.9	1.9	100
21.9 - 23.4	1.5	1.5	100
23.4 - 26.0	2.6	2.6	100
26.0 - 29.0	3.0	3.0	100
29.0 - 32.0	3.0	3.0	100
32.0 - 33.0	1.0	1.0	100
33.0 - 35.0	2.0	2.0	100
35.0 - 38.0	3.0	3.0	100
38.0 - 41.0	3.0	3.0	100
41.0 - 44.0	3.0	3.0	100
44.0 - 46.8	2.8	2.8	100 broken
46.8 - 47.45	0.65	0.65	100 broken
47.45 - 49.60	2.15	2.15	100
49.60 - 50.0	0.4	0.25	63 broken
50.0 - 51.1	1.10	0.2	18 Fault
51.1 - 51.2	0.10	0.10	100 Fault
51.2 - 51.5	0.3	0.10	33 Fault
51.5 - 52.1	0.6	0.1	17 Fault
52.1 - 53.0	0.9	0.1	11 Fault
EOH 53.0 m			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/9A

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8573	0	1	1.0	1.0	0.19	<0.01		
74	1	2	"	"	0.16	<0.01		
75	2	3	"	"	0.04	<0.01		
76	3	4	"	"	<0.01	<0.01		
77	4	5	"	"	0.21	<0.01		
78	5	6	"	"	0.43	0.01		
79	6	7	"	"	<0.01	<0.01		
80	7	8	"	"	<0.01	<0.01		
81	8	9	"	"	0.03	<0.01		
82	9	10	"	"	0.02	<0.01		
83	10	11	"	"	0.07	<0.01		
84	11	12	"	"	0.05	<0.01		
85	12	13	"	"	0.80	0.02		
86	13	14	"	"	0.30	0.01		
87	14	15	"	"	0.22	0.01		
88	22	23	"	"	0.05	<0.01		
89	23	24	"	"	0.06	<0.01		
90	24	25	"	"	0.83	0.01		
91	25	26	"	"	2.15	0.02		
92	26	27	"	"	0.92	0.01		
93	27	28	"	"	2.70	0.03		
94	28	29	"	"	0.54	0.01		
95	29	30	"	"	0.30	0.01		
96	30	31	"	"	1.22	0.02		
97	31	32	"	"	0.22	<0.01		
98	32	33	"	"	0.30	<0.01		
99	33	34	"	"	0.98	0.01		
D 8600	34	35	"	"	1.22	0.02		
1	35	36	"	"	1.46	0.02	26m @ 1.21 WO_3	
2	36	37	"	"	2.00	0.04		
3	37	38	"	"	0.39	<0.01		
4	38	39	"	"	0.13	<0.01		
5	39	40	"	"	0.49	<0.01		
6	40	41	"	"	1.27	0.01		
7	41	42	"	"	0.24	<0.01		
8	42	43	"	"	0.62	0.01		
9	43	44	"	"	4.10	0.03		
10	44	45	"	"	3.80	0.03		
11	45	46	"	"	0.26	<0.01		
12	46	47	"	"	0.35	<0.01		
13	47	48	"	"	1.99	0.02		
14	48	49	"	"	2.27	0.02		
15	49	50	"	"	0.60	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. 320/9A

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT T.A.O.C)	JOINT FILLING	BEDDING ANGLE (W R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 6.5	Gh	5		Chl,clay,carb		100	85	
6.5 - 13.25	Ch	5-10		Clay,carb,chl	10°:10 m	100	63	
13.25- 23.0	Bh	4-8		Clay,chl,carb,sul		100	71	
23.0 - 35.0	Gh	6		Chl,clay,carb		100	79	
35.0 - 42.8	Bh/Ph	8-15		Chl,clay,carb,sul		100	51	
42.8 - 49.6	Gh	10->20		Clay,chl,carb,sul		100	63	
49.6 - 53.0	FAULT ZONE							
EOH 53.0 m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 0.0 - 3.0 m NQ
   3.0 -53.0 m BQ

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D320/9A

0.0 - 49.60 m MARBLE MARKER

Marble marker unit consisting of the following subdivisions:-

0.0 - 6.5 m Garnet Skarn Coarse grained skarn like rock with grossular, andradite, pyroxene and minor unreplaced marbles. Some scheelite is present

6.5 - 13.25 m Marble with minor skarn. Soft white to grey coloured marbles with abundant clay alteration zones and patches. (particularly from 8.11 m).

Minor skarn (abund. grossular) is developed at the base of the unit from 12-13.25 m. Minor Scheelite is present.

So 10^{o} to LCA at 10 m.

13.25 - 23.0 m Biotite Hornfels Fine grained biotite hornfels unit with some minor greenish pyroxene (with grossularite) alteration zones and patches.

The unit is broken and clayey around 13.65 m. The unit is virtually barren of scheelite mineralization.

23.0 0 35.0 m Skarn - Marble minor pyroxene hornfels. Intermixed greenish - brown coloured unit consisting of marble, skarn (grossular - andradite - pyroxene) and pyroxene hronfels. The unit is somewhat broken at the top, particularly around 23.4 m (clay pug zone).

Minor scheelite mineralization is present.

35.0 - 42.80 m Biotite Hornfels/Pyroxene Hornfels Interbedded biotite hornfels/pyroxene hornfels with minor grossular garnet. The core is fractured and broken and contains rare scheelite mineralization.

42.80 - 49.60 m Skarn - Biotite Hornfels/Pyroxene Hornfels Intermixed and disturbed zone of skarn (mainly grossular), biotite hornfels, pyroxene hornfels, and possible unreplaced marble (?). The core is quite fractured and broken particularly on approaching the base of the unit. A probable fault occurs from 46.0 - 46.6 m where the core is clayey and rubbly. Some good coarse grained scheelite mineralizatio is present. So 10^{o} to LCA at 46.0 m.

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/9A

49.60 - 53.00 m	DECLINE FAULT - GRASSY RIVER FAULT
	Badly broken, brecciated, clayey, rubbly fault zone with some 2.5 m of core loss.
	EOH 53.00 m.

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. 320/8

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S10 Diamond Drill Drive

PURPOSE OF HOLE: To Test Lower C-lens and Locate Granite Basement

CO-ORDS: 220 320 E 563975 N

INCLINATION: -38°

BEARING: 180° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 181° 02' °GRID °MAG

SURVEYED IN BY: B Davies DATE: 30/8/78

ACTUAL CO-ORDS: 220320.7 E 563974.2 N

R.L. OF COLLAR: -241.4

INCLINATION OF HOLE: -38° 46'

PICKED UP BY: B Davies DATE: 30/8/78

SUMMARY

LOGGED BY: G. L. Buckland

RESULTS: Lower C lens 0-30 m, 30 m @ 0.73% WO_3

DRILLING

DATE COMMENCED: 18/8/79 DATE TERMINATED: 23/8/79

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 105.5

WEDGE PLACED: Nil DEPTH: -

EXTENSION: Nil

FINAL DEPTH: 100.5 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot to 100.50m

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/8

Survey method: Single Shot
Final depth: 100.5 m
Casing depth: 1.0 m

Depth surveyed to: 100.5 m
Date surveyed 23.8.78
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		S	E
50 m	173°	183°	50° 45'	-39.25°	31.64 m	38.43	4.72
100.5 m	173°	183°	50° 45'	-39.25°	63.59 m	77.24	9.49

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/8

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3	3.0	3.0	100
3 - 5.5	2.5	2.39	96
5.5 - 8.4	2.90	2.93	101
8.4 - 11.4	3.0	2.95	98
11.4 - 12.7	1.3	1.30	100
12.7 - 14.5	1.80	1.88	104
14.5 - 17.5	3.0	3.0	100
17.5 - 20.0	2.5	2.65	106
20.0 - 21.5	1.5	1.5	100
21.5 - 22.1	0.6	0.55	92
22.1 - 24.0	1.90	1.90	100
24.0 - 26.5	2.50	2.40	96
26.5 - 29.5	3.0	2.93	98
29.5 - 32.5	3.0	3.0	100
35.5 - 34.4	1.90	1.90	100
34.4 - 34.9	0.5	0.50	100
35.1 - 35.1	0.2	0.20	100
35.1 - 36.6	1.50	1.50	100
36.6 - 38.8	2.20	2.15	98
38.8 - 41.5	2.70	2.80	104
41.5 - 44.5	3.0	3.0	100
44.5 - 47.5	3.0	2.96	99
47.5 - 50.5	3.0	3.0	100
50.5 - 53.5	3.0	3.0	100
53.5 - 56.5	3.0	3.0	100
56.5 - 58.0	1.5	1.50	100
58.0 - 60.0	2.0	1.85	93
60.0 - 62.5	2.5	2.78	111
6 .5 - 65.1	2.60	2.45	94
65.1 - 67.5	2.40	2.25	94
67.5 - 68.7	1.20	1.20	100
68.7 - 71.0	2.3	2.50	109
71.0 - 71.7	0.7	0.62	89
71.7 - 72.3	0.6	0.55	92
72.3 - 73.1	0.8	0.82	103
73.1 - 75.5	2.40	2.22	93
75.5 - 76.4	0.90	1.00	111
76.4 - 77.0	0.60	0.60	100
77.0 - 78.0	1.0	0.95	95
78.0 - 79.0	1.0	0.98	98
79.0 - 79.6	0.6	0.62	103
79.6 - 82.0	2.4	2.40	100
82.0 - 84.6	2.6	2.46	95
84.6 - 87.6	3.0	3.0	100
87.6 - 90.6	3.0	2.95	98
90.6 - 93.3	2.70	2.76	102
93.3 - 97.6	4.30	4.30	100
97.6 - 100.5	2.90	2.90	100

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 320/8

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0 - 20.0	Banded Gh	2		Minor Chlorite	3.5m; 25° 9.5m; 27° 12m; 30° 17m; 30°	100	63	Core displays many bedding plane partings thoughout. Minor broken Bh. 12.6 - 12.7
20.0 - 41.5	Banded Gh/bfb	2		Minor Clay, Minor Carbonate	23.5m; 30° 27.5m; 30° 33m; 34° 28.5m; 34° 41m; 25°	99	53	Core displays many bedding plane partings thoughout particularly: 21.3 - 22.6 34.4 - 36.8
41.5 - 56.5	bfb/Lv	1		Minor Clay		99	98	Excellent core quality
56.5 - 76.4	bph	10		Minor chlorite calcite filled fracture @ 60.56m	59m; 27° 66m; 30° 72.5m; 28° 75m; 18°	99	41	Poor core quality, refected by many bedding plane partings thoughout. Rubbly core: 57 - 58 m 59.7 - 61.2 m 70.5 - 71.0 m

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $= \frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 0 - 100.5 m, 35 mms dia.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 320/8

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
76,4 - 100.5	bph	4		Minor Carbonate Chlorite and pyrite @ 96m.	78.5m; 30° 92.3m; 5° 96.5m; 22° 100m; 15°	99	82	Core riddled with carbonate veinlets: 76.5 - 77.25 78 - 78.15 and at 79.6, 81.7. Rubbly core: 79.45-79.60 80.24-80.50 81.9 -82.0 85.6 -85.9 Minor brecciated core at 96.4 m. FAULT ZONES: (Rubbly core, weakly brecciated, carbonate veinlets, Chlorite: 76.90 - 77.15 78 - 78.15 78.95 - 80.5 81.6 - 82.0 also 85.6 - 85.8 Bh rubble.

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $= \frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size.

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/8

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8214	0	1	1.0	1.0	0.36	0.05		
15	1	2	"	"	0.74	0.04		
16	2	3	"	"	1.01	0.03.		
17	3	4	"	"	0.74	0.02		
18	4	5	"	"	2.97	0.05		
19	5	6	"	"	0.62	0.02		
20	6	7	"	"	1.07	0.02		
21	7	8	"	"	1.06	0.03		
22	8	9	"	"	0.72	0.02		
23	9	10	"	"	0.84	0.03		
24	10	11	"	"	0.39	0.01		
25	11	12	"	"	0.54	0.02		
26	12	13	"	"	0.24	0.01		
27	13	14	"	"	0.45	0.01		
28	14	15	"	"	0.16	<0.01		
29	15	16	"	"	0.24	<0.01		
30	16	17	"	"	1.20	0.02		
31	17	18	"	"	1.77	0.02		
32	18	19	"	"	1.08	0.02		
33	19	20	"	"	1.28	0.02		
34	20	21	"	"	0.52	0.01		
35	21	22	"	"	0.73	0.01		
36	22	23	"	"	0.72	0.01		
37	23	24	"	"	0.31	0.01		
38	24	25	"	"	0.06	<0.01		
39	25	26	"	"	0.54	0.01		
40	26	27	"	"	0.45	0.01		
41	27	28	"	"	0.23	<0.01		
42	28	29	"	"	0.35	0.01		
43	29	30	"	"	0.37	0.01		
44	30	31	"	"	0.11	<0.01		
45	31	32	"	"	<0.01	<0.01		
46	32	33	"	"	0.06	<0.01		
47	33	34	"	"	0.13	0.01		
48	34	35	"	"	<0.01	0.01		
49	35	36	"	"	<0.01	0.01		
50	36	37	"	"	<0.01	0.01		
51	37	38	"	"	1.06	0.02		
52	38	39	"	"	0.74	0.01		
53	39	40	"	"	<0.01	<0.01		
54	40	41	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/8

0 - 30.25 BANDED GARNET HORNFELS

An interval dominantly of bedded andradite garnet hornfels containing medium grade fine grained disseminated scheelite mineralisation to 21.3 m. Minor barren biotite, pyroxene and calcite hornfels interbeds occur thoughout this interval being prevalent in the intervals:

9.80 - 10.5 m
11.8 - 12.3 m

From 21.3 m the sequence contains a greater proportion of barren Bh, Ph and minor Ch interbeds amongst wider andradite garnet hornfels beds which contain low - medium grade fine grained scheelite mineralisation.

Bedding orientations:

3.5 m	27°	LAOC
9.5 m	27°	"
12.0 m	30°	"
17.0 m	30°	"
23.5 m	30°	"
27.5 m	30°	"

Coarse scheelite crystals occur at 4.75, 4.85 and 17.25 m.

Core quality is good thoughout with many bedding plane partings.

30.25 - 41.74 BANDED FOOTWALL BEDS

Interbedded sequence of principally barren thin Ch, Ph, Bh and grossular garnet beds with development of wealky mineralised andradite garnet hornfels from:

32.17 - 32.19,
33.34 - 33.43, and
37.25 - 38.40 m.

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No.D 320/8

Bedding orientations:

33 m ; 34°
38.5m; 34°
41 m ; 25°

Core quality is poor with many bedding plane partings present.

41.74 - 65.92 LOWER METAVOLCANICS

A grey flecked metavolcanic horizon of excellent core quality.

56.92 - 100.5 BIOTITE PYROXENE HORNFLES

A thinly (1cm) bedded sequence of grey-green Ph and black Bh. Very minor scheelite mineralisation is developed in minor grossular hornfels beds from:

74.95 - 74.96
93.25 - 93.3
97.7 - 97.80

Aplite dykes:

69.75 - 70.25
76.38 - 76.40
77.54
85.90 - 90.67
90.83 - 90.85
95.87 - 95.89
98.33 - 98.35
98.56 - 98.58 and
99.6 - 99.62

Fault zones are developed in the following intervals of rubbly core, carbonate veinlets, minor brecciation and chlorite:

76.90 - 77.15
78.0 - 78.15
78.95 - 80.5
81.6 - 82.0

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/8

From 85.6 - 85.8 the Bh is rubble. ? Fault zone. Bedding:

59 m	27°	LAOC
66 m	30°	"
75 m	18°	"
92.3 m	5°	"
100 m	15°	"
100.5 m	E.O.H.	

GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. D 320/7

PLANNING

Proposer: ...G. J. Bujtor..... Depth: .....

Location: ...S10 Diamond Drill drive.....

.....

Purpose of Hole: .To test footwall of C lens ore horizon and locate granite basement.

Co-ords: ....220320..... E .....563975..... N

Inclination: -90°.....

Bearing: .....°Grid .....°Mag

Target: ..... E ..... N

Depth: .....

Approved by: ..... Date: .....

SURVEY

Survey Co-ords: ..... E ..... N

Surveyed Bearing: ..330°06'.....°Grid .....°Mag

Surveyed in by: ...B. Davies..... Date .....

Actual Co-ords: ...220320.8..... E .....563975.5..... N

R.L. of Collar: ....-241.51.....

Inclination of Hole: ...-87° 54'.....

Picked up By: .....B. Davies..... Date 30-8-1978.....

SUMMARY

Logged By: ....G.J.Bujtor..... Date .....

Results: ....Lower C lens 0 - 13 m, 13 m @ 0.46% WO3.....

.....

.....

.....

DRILLING

Date Commenced: ...8-8-1978..... Date Terminated...11-8-1978...

Driller/Contractor ..A.D.D.....

Casing:	Size :	BQ			
	Depth :	1m			
Core:	Size :	46TT			
	Depth :	46.3m			

Wedge Runoff:

Wedge placed: Depth

Proposed by: Approved by

Reason .

Extension:

Final Depth: 46.3m

Reason for Termination: Successfully tested Lower C lens and located granite basement.

Condition of hole on completion:

Casing;

Cemented:

Bore hole survey: Surveyed to 46 m

Water:

Comments on Drilling Conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/7

Survey method: Singleshot Camera
Final depth: 46.3 m
Casing depth: 1m

Depth surveyed to: 46.0 m
Date surveyed 11-8-1978
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
0	330	320	1	-89	0	0	0
16	360	350	1	-89	16.0	0.28	0.05
46	295	285	1	-89	45.99	0.42	0.56
EOH 46.3 m							

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/7

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.2	3.2	2.7	84
3.2 - 5.0	1.8	1.8	100
5.0 - 8.5	3.5	3.5	100
8.5 - 11.5	3.0	3.0	100
11.5 - 14.5	3.0	3.0	100
14.5 - 17.5	3.0	3.0	100
17.5 - 19.2	1.7	1.7	100
19.2 - 22.2	3.0	3.0	100
22.2 - 25.2	3.0	3.0	100
25.2 - 28.2	3.0	3.0	100
28.2 - 31.2	3.0	3.0	100
31.2 - 34.0	2.8	2.8	100
34.0 - 37.0	3.0	3.0	100
37.0 - 40.0	3.0	3.0	100
40.0 - 41.5	1.5	1.6	107
41.5 - 43.3	1.8	1.8	100
43.3 - 46.3	3.0	3.0	100
EOH 46.3 m			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 3907

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8134	0	1	1.0	1.0	0.47	0.02		
35	1	2	"	"	0.42	<0.01		
36	2	3	"	"	0.11	<0.01		
37	3	4	"	"	0.35	0.01		
38	4	5	"	"	0.30	0.01		
39	5	6	"	"	0.10	<0.01		
40	6	7	"	"	0.62	0.01		
41	7	8	"	"	0.41	<0.01		
42	8	9	"	"	1.66	<0.01		
43	9	10	"	"	0.35	<0.01		
44	10	11	"	"	0.20	<0.01		
45	11	12	"	"	0.66	<0.01		
46	12	13	"	"	0.31	<0.01		
47	13	14	"	"	0.20	<0.01		
48	14	15	"	"	0.33	<0.01		
49	15	16	"	"	0.08	<0.01		
50	16	17	"	"	0.13	<0.01		
51	17	18	"	"	0.01	<0.01		
52	18	19	"	"	0.03	0.01		
53	19	20	"	"	0.15	<0.01		
54	20	21	"	"	0.25	0.02		
55	21	22	"	"	1.04	<0.01		
56	22	23	"	"	0.18	<0.01		
57	23	24	"	"	0.13	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 320/7

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 17.4	Lower C	5-6		Chl,carb	70°:7.8 m	99	87	
17.4 - 24.15	BFB	8-15		Chl,clay,carb	55°:13.7 m	100	61	
24.15 - 31.2	Vol	4-2		Chl,carb,clay		100	69	
31.2 - 40.2	Bh/Ph	10		Chl,clay	57°:37.5 m	100	51	
40.2 - 46.3	Granite	10-15		Carb		100	50	
EOH 46.3 m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 46TT

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/7

0.00 - 15.30 m **BANDED SKARN - LOWER C LENS**

Extremely well banded/bedded Lower C lens consisting of andradite garnet, biotite hornfels, pyroxene hornfels, marble and minor grossular garnet. Fine disseminated scheelite occurs throughout, apart from the somewhat barren interbeds. The following bedding angles were noted:-

?So	46°	to LCA	at	3.9 m
So	70°	to LCA	at	7.8 m
So	74°	to LCA	at	9.0 m
So	56°	to LCA	at	13.7 m

15.30 - 24.15 m **BANDED FOOTWALL BEDS**

Well bedded footwall beds consisting of marble, pyroxene hornfels and grossular garnet at the top of the sequence (15.3 - 17.4 m); Biotite hornfels/pyroxene hornfels from 17.4 - 19.6 m; and patchily mineralized banded footwall beds to base of unit. The biotite hornfels/pyroxene hornfels segments of the unit are broken and fractured, particularly from 17.4 - 19.20 m and 20.7 - 21.2 m. A fault breccia is present around 18.25 m.

A small intrusion of Lower Volcanics occur around 22.4 m.

So	53°	to LCA	at	16.45 m
So	55°	to LCA	at	20.45 m

24.15 - ?31.20 m **LOWER VOLCANICS**

Lower Volcanic unit with small dark brown phenocrysts of mafic minerals.

?31.20 - 40.20 m **BIOTITE HORNFELS/PYROXENE HORNFELS**

Interbedded biotite hornfels/pyroxene hornfels with rare grossular/pyroxene interbeds particularly from 38.0 - 40.2 m. Chlorite and some slickensides are common on joints.

So	57°	to LCA	at	37.5 m

Aplite vein from 32.5 - 33.3 m

40.2 - 46.3 m **GRANITE / ADAMELLITE**

Fine to coarse grained granite with noticeable chilled margin. No scheelite mineralization is present.

EOH 46.30 m

GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. D 320/6

PLANNING

Proposer: G. J. Bujtor Depth: .....

Location: S10 Diamond Drill Drive

.....

Purpose of Hole: To define C lens: locate Wedge Fault & provide cover drilling for S9 Diamond Drill Drive

Co-ords: 220320 E 563975 N

Inclination: +15°

Bearing: 180° °Grid °Mag

Target: ..... E ..... N

Depth: .....

Approved by: ..... Date: .....

SURVEY

Survey Co-ords: ..... E ..... N

Surveyed Bearing: 182°09 °Grid °Mag

Surveyed in by: B. Davies Date .....

Actual Co-ords: 220320.7 E 563973.3 N

R.L. of Collar: -239.8

Inclination of Hole: 14° 33'

Picked up By: B. Davies Date 30-8-1978

SUMMARY

Logged By: G. J. Bujtor Date .....

Results: Min. M/M 26-33 m, 7 m @ 0.55% WO_3

Upper C 33-46 m, 13 m @ 1.68% WO_3

.....

.....

DRILLING

Date Commenced: 2-8-1978 Date Terminated 8-8-1978

Driller/Contractor A.D.D.

Casing:	Size :				
	Depth :				
Core:	Size :	46TT			
	Depth :	82.3m			

Wedge Runoff:

Wedge placed: Depth

Proposed by: Approved by

Reason .

Extension:

Final Depth: 82.3 m

Reason for Termination: Successfully tested C lens and located Wedge and Swan Faults.

Condition of hole on completion:

Casing;

Cemented:

Bore hole survey: Surveyed to 82.3 m

Water: Nil

Comments on Drilling Conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 320/6

Survey method: Singleshot Camera
Final depth: 82.3 m
Casing depth: Nil

Depth surveyed to: 82.3 m
Date surveyed : 9-8-1978
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		S	E
22	184	174	76.5	+13.5	+ 5.13	21.27	2.24
52	182	172	77.0	+13	+11.88	50.22	6.31
82.3m	181	171	77.0	+13	+18.70	79.38	10.93

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY	
0.0 - 2.2	2.2	2.2	100	
2.2 - 4.3	2.1	2.0	95	
4.3 - 6.0	1.7	1.1	65	broken
6.0 - 6.7	0.7	0.7	100	broken
6.7 - 7.5	0.8	0.4	50	broken
7.5 - 8.1	0.6	0.7	117	
8.1 - 9.5	1.4	1.4	100	
9.5 - 10.3	0.8	0.8	100	
10.3 - 11.2	0.9	0.9	100	
11.2 - 12.0	0.8	0.8	100	broken
12.0 - 12.5	0.5	0.35	70	broken
12.5 - 13.0	0.5	0.5	100	broken
13.0 - 13.9	0.9	0.8	89	broken
13.9 - 14.8	0.5	0.4	80	broken
14.8 - 16.0	1.2	1.2	100	
16.0 - 18.1	2.1	2.1	100	
18.1 - 20.4	2.3	2.0	87	
20.4 - 20.8	0.4	0.5	125	
20.8 - 23.0	2.2	2.6	118	
23.0 - 23.8	0.8	0.8	100	broken
23.8 - 26.1	2.3	2.2	96	
26.1 - 29.1	3.0	3.0	100	
29.1 - 32.1	3.0	3.0	100	
32.1 - 35.1	3.0	3.0	100	
35.1 - 38.1	3.0	3.0	100	
38.1 - 41.1	3.0	3.0	100	
41.1 - 44.1	3.0	3.0	100	
44.1 - 46.6	2.5	2.5	100	slightly broken
46.6 - 49.1	2.5	2.5	100	
49.1 - 51.3	2.2	2.2	100	
51.3 - 52.0	0.7	0.7	100	broken
52.0 - 53.5	1.5	1.5	100	broken
53.5 - 55.6	2.1	2.1	100	broken
55.6 - 57.2	1.6	1.6	100	broken
57.2 - 59.2	2.0	(1.8?)	90	broken
59.2 - 62.2	3.0	3.0	100	
62.2 - 65.2	3.0	3.0	100	
65.2 - 68.2	3.0	3.0	100	
68.2 - 71.2	3.0	3.0	100	
71.2 - 74.2	3.0	3.0	100	
74.2 - 77.2	3.0	3.0	100	
77.2 - 80.2	3.0	3.0	100	
80.2 - 82.3	2.3	2.3	100	

EOH 82.3 m

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/6

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8074	22	23	1.0	1.0	0.05	0.01		
75	23	24	"	"	<0.01	<0.01		
76	24	25	"	"	0.23	0.01		
77	25	26	"	"	0.11	0.02		
78	26	27	"	"	1.52	0.03		
79	27	28	"	"	0.32	0.01		
80	28	29	"	"	0.07	0.01		
81	29	30	"	"	0.58	0.01		
82	30	31	"	"	0.34	0.01		
83	31	32	"	"	0.39	0.01		
84	32	33	"	"	0.60	<0.01		
85	33	34	"	"	1.00	<0.01		
86	34	35	"	"	1.24	<0.01		
87	35	36	"	"	1.20	<0.01		
88	36	37	"	"	1.24	0.01		
89	37	38	"	"	1.38	0.01		
90	38	39	"	"	2.39	0.03		
91	39	40	"	"	4.15	0.04		
92	40	41	"	"	2.00	0.02		
93	41	42	"	"	1.56	0.01		
94	42	43	"	"	2.49	0.03		
95	43	44	"	"	1.57	0.02		
96	44	45	"	"	0.70	0.01		
97	45	46	"	"	0.88	0.02		
98	46	47	"	"	0.02	0.02		

SPECIFIC GRAVITY
Depth (metres):
Rock Type :
S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 320/6

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 16.3	Ch/Bh	10 ->20		Clay,chl,carb,sul		95	30	
16.3 - 33.15	Ch/Ph	4 - 13		Clay,chl,carb,sul		98	64	
33.15 - 46.0	Gh/Pgh	5		Clay,chl,carb,sul		100	76	
46.0 - 46.4	FAULT - WEDGE							Broken
46.4 - 51.0	Bh	6 - 9		Chl,clay,sulph		100	59	
51.0 - 55.0	Bh	15 - 20		Clay,chl,carb		100	39	Broken
55.0 - 59.2	FAULT - SWAN							Broken
59.2 - 82.3	Bh	3 - 4		Chl,carb		100	90	
EOH 82.3 m								

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) += $\frac{\text{Length Core 10 cm}}{\text{Length Drilled}}$ %
3. Core size. 46TT

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/6

0.0 - ?33.15 m **MARBLE MARKER**

Marble marker unit consisting of the following subdivisions:-

0.0 - 2.0 Barren marble with minor orange - brown grossular garnet. Rare scheelite specks present.

2.0 - 16.30 m Biotite Hornfels fine grained dark brown coloured biotite hornfels with some patches/zone of pyroxene hornfels alteration. The core is somewhat fractured and broken particularly from 4.0 - 8.0 m, and 11.5 - 14.8 m.

Some minor scheelite mineralization is present from 6.0 - 7.5 m in assocaition with pyroxene hornfels.

Fine hairline carbonate filled fractures are abundant throughout.

16.30 - ?23.00 m Pyroxene hornfels/biotite hornfels Intermixed sequence of the above with evidence of a shear running subparallel to long axis of core from 18-20 m. Scheelite mineralization is virtually absent.

?23.00 - ?33.15 m Marble/Pyroxene hornfels - Intermixed sequence of marbles and assocaited pyroxene hornfels alteration zones and patches with minor grossular garnet. Minor scheelite mineralization is present. Badly broken and fractured ground occurs around 23.6 - 23.9 m which may possibly represent a shear or fault zone.

The unit becomes increasinly pyroxene rich on approaching Upper C lens.

?33.15 - ?43.8 m **ANDRADITE SKARN - UPPER C LENS**

Coarse grained andradite garnet skarn with good disseminated scheelite mineralization throughout.

Some zones of fractured core is present - around 40.55 m, around 41.0 m, 43.3 - 43.8 m and 38.1 m (rubble).

Zones of green pyroxene rich rock (80-90% amphiboles) occur from 42.3 - 42.75 m, 43.8 - 44.3 m and 38.65 - 38.75m.

The contact between Upper C lens and PGH is diffuse and difficult to tie down exactly.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/6

?43.80 - 46.00 m — PYROXENE GARNET HORNFELS

Greenish coloured pyroxene rich rock with remnant carbonate pods almost wholly replaced by grossular garnet. Some scheelite mineralization is present. The unit becomes quite fractured approaching the Wedge Fault.

46.00 - 46.40 m — WEDGE FAULT

Highly sheared and brecciated (recemented) fault zone with no visible scheelite.

46.00 - ?55.0 m — BIOTITE HORNFELS

Fine grianed dark brown coloured biotite hornfels with evidence of shearing (cleavage formation) adjacent to the Wedge Fault.

From 51.8 - 55.0 m, the core becomes increasingly broken and fractured with numerous rubble zone (eg 53.5 m).

No visible scheelite is present.

?55.0 - 59.2 m — SWAN FAULT ZONE

Badly broken brecciated, fractured, rubbly, clayey fault zone with all the core <10 cm in length. Shearing of the biotite hornfels is common.

59.0 - 82.30 m — BIOTITE HORNFELS

Fine grained, competent, grey coloured biotite hornfels with some zones and patches of grossular garnet and pyroxene hornfels (close to B lens ie. above B lens).

Minor fractured core (probable fault) occurs at 73.0 m No visible scheelite is present. A small aplite dyke occurs at 65.8 m.

EOH 82.3 m.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 320/5

PLANNING

Proposer: M. J. Danielson **Depth:** 140m

Location: R 13, -150m R.L.

Purpose of hole: C lens Oreblocking

Co-ordinates:	220 320 E	564 061 N	
Inclination:	-58°	Magnetic:	
Bearing	180 Grid	Target Depth:	
Target:	E	N	
Approved by: M. C. R.		Date: 1-7-77	

SURVEY

Survey Co-ords:	E	N
Survey bearing: 192° 20' Grid		Magnetic:
Surveyed in by:		Date:
Actual Co-ords: 220 321.78 E 564 060.76		N
R.L. of Collar: R-149.1		Inclination of Hole: -58° 10'
Picked up by: R. J. H.		Date: 050977

SUMMARY

Logged by: G. L. Buckland / M. J. Danielson

Results: pgh: 44 - 48, 4m @ 0.65% WO_3 Upper C lens: 58 - 84m, 26m @ 2.08%WO

Marble marker: 89 - 92m, 3m @ 0.64% WO_3

Lower C lens: 98 - 109m, 11m @ 0.59% WO_3

DRILLING

Driller/Contractor: A. D. D.

Date commenced: 31-8-77 **Date terminated:** 5-10-77

Casing: Size: BX
Depth: 52

Core: Size: NQ BQ
Depth: 52 127.1

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

Extensions: Nil

Reason for termination: Hole in lower metavolcanics

Condition of hole on completion: Final depth: 127.1
Casing: 1m BX remains
Cemented: Yes

Bore hole survey: Multishot to 127.0

Water: Nil

Comments on drilling conditions: Bad ground due to decline fault caused frequent delays.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 320/5

Survey method: Multishot Camera
Final depth : 127.1
Casing depth : 52m

Depth surveyed to: 127m
Date surveyed: 4-10-77
Surveyed by : L. Denby
Checked by : M. D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	W
30	196	186	32	-58	25.41	15.85	1.67
57	196	186	31.25	-58.75	48.45	29.85	3.14
96	200	190	30.25	-59.75	81.99	49.56	5.98
117	200	190	31	-59	100.06	60.11	7.78
127.1	202	192	30.25	-59.75	108.74	65.18	8.69

REMARKS: Bearing unknown in uppermost 52metre. Hole must have been deffected West in Fault 27 - 38.

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.4	3.40	3.10	91
7.3	3.90	2.40	62
10.3	3.0	3.10	103
13.3	3.0	2.90	97
16.3	3.0	2.93	98
19.3	3.0	2.98	99
22.3	3.0	2.94	98
25.3	3.0	3.10	103
28.0	2.70	2.70	100
31.0	3.0	1.80	60
34.0	3.0	2.85	95
37.0	3.0	1.20	40
39.8	2.80	2.30	82
42.8	3.0	3.0	100
45.0	2.2	2.2	100
47.2	2.2	1.8	82
50.2	3.0	3.0	100
53.2	3.0	3.0	100
56.2	3.0	2.4	80
59.2	3.0	3.0	100
62.2	3.0	2.9	97
65.2	3.0	3.0	100
68.2	3.0	3.0	100
71.2	3.0	3.0	100
74.2	3.0	3.0	100
77.2	3.0	3.0	100
80.2	3.0	2.85	95
83.2	3.0	3.0	100
86.2	3.0	3.0	100
89.2	3.0	2.6	87
92.2	3.0	3.0	100
95.2	3.0	3.0	100
98.2	3.0	3.0	100
101.2	3.0	3.0	100
104.2	3.0	3.0	100
107.2	3.0	3.0	100
110.2	3.0	2.85	95
113.2	3.0	2.9	97
116.2	3.0	2.75	92
119.2	3.0	2.75	92
122.2	3.0	3.0	100
125.2	3.0	3.0	100
127.1	1.9	1.8	95
EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/5

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 10.3	gph/ch	+20				83	10	core is of poor quality throughout and has little structural strengti Rubble- 0-3m Brecciated, puggy core: 3.70 - 3.80 7.3 - 9.5 Faults. (it has been difficult to measure precise limits as core is so badly broken).
10.3 - 28.0	ch/gph	2		carbonate recemented		99	79	Generally- this interval is broken brecciated in places, leached and contains numerous carbonate filled vughs. eg. broken: 11.0 - 11.3 27.6 - 28.0 Brecciated: 15.2 - 15.3 18.5 - 18.6
28.0 - 39.8	bh / pgh	28.0-38.5: +20; 38.5-		abundant carbonate filled vughs		69	16	Very poor core quality throughout:

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size. 0 - 45m NQ (46.5 mms. dia.)
   45 -127.1 m BQ (36.5 mms dia.)

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/5

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
		39.5: 4.						Rubble: 28.0 - 38.5, brecciated, puggy. decline fault zone. (not much point in measuring lengths of brecciation etc as core is almost completely rubble making accurate measurements almost impossible)
39.8-56.2	pgh	8		clay		94	81	
56.2-83.2	gh	3		clay		99	94	excellent ground.
83.2-127.1	banded gh, bfb lV	8		clay carbonate	95m: 40° 104m: 35° 112m: 45° 118m: 35°	97	72	broken ground 110.8 - 113.5

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size.

GEOPEKO LIMITED -

ASSAY DATA

D.D.H. No. D 320/5

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo	
D 6301	43	44	1.0	1.0	<0.01	<0.01	
2	44	45	"	"	0.80	0.03	pgh: 44 - 48m
3	45	46	"	0.85	0.92	0.03	4m @ 0.65% WO_3
4	46	47	"	0.74	0.34	0.01	0.02% Mo
5	47	48	"	1.0	0.53	0.02	
6	48	49	"	"	<0.01	<0.01	
7	49	50	"	"	<0.01	<0.01	
8	50	51	"	"	<0.01	<0.01	
9	51	52	"	"	0.33	0.01	
10	52	53	"	"	<0.01	<0.01	
1	53	54	"	0.85	<0.01	<0.01	
2	54	55	"	0.80	0.16	<0.01	
3	55	56	"	0.80	0.12	<0.01	
4	56	57	"	1.0	6.3	0.25	
5	57	58	"	"	0.13	<0.01	
6	58	59	"	"	1.91	0.07	
7	59	60	"	"	3.44	0.17	
8	60	61	"	"	1.64	0.08	
9	61	62	"	"	4.87	0.21	
20	62	63	"	"	2.63	0.08	
1	63	64	"	"	5.1	0.21	
2	64	65	"	"	2.83	0.09	
3	65	66	"	"	1.51	0.06	
4	66	67	"	"	0.81	0.04	
5	67	68	"	"	1.16	0.05	
6	68	69	"	"	1.89	0.08	
7	69	70	"	"	1.47	0.07	Upper C lens:
8	70	71	"	"	1.74	0.08	58 - 84m,
9	71	72	"	"	1.93	0.09	26 @
30	72	73	"	"	1.42	0.06	
1	73	74	"	"	1.45	0.07	2.08% WO_3
2	74	75	"	"	0.97	0.04	0.08% Mo
3	75	76	"	"	1.95	0.08	
4	76	77	"	"	3.05	0.11	
5	77	78	"	"	3.04	0.11	
6	78	79	"	"	2.81	0.10	
7	79	80	"	"	2.65	0.09	
8	80	81	"	"	1.33	0.04	
9	81	82	"	"	0.63	0.02	
40	82	83	"	"	0.82	0.04	
1	83	84	"	"	0.91	0.04	
2	84	85	"	"	0.09	<0.01	

SPECIFIC GRAVITY

Depth (m):
Rock Type:
S.G. :

Determined by:

GEOPEKO LIMITED -

ASSAY DATA

D.D.H. No. D 320/5

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo	
D 6343	89	90	1.0	1.0	0.46	0.02	Marble Marker ↓
4	90	91	"	"	0.91	0.06	89 - 92m, 3m
5	91	92	"	"	0.56	0.03	@ 0.64% WO_3 0.04% Mo
6	92	93	"	"	<0.01	<0.01	
7	93	94	"	"	<0.01	<0.01	
8	94	95	"	"	<0.01	<0.01	
9	95	96	"	"	<0.01	<0.01	
50	96	97	"	"	<0.01	<0.01	
1	97	98	"	"	<0.01	<0.01	
2	98	99	"	"	0.93	0.05	↓
3	99	100	"	"	1.32	0.07	Lower C lens
4	100	101	"	"	0.45	0.02	98 - 109m,
5	101	102	"	"	0.28	0.01	11m @
6	102	103	"	"	0.34	0.02	0.59% WO_3
7	103	104	"	"	1.65	0.07	0.03% Mo
8	104	105	"	"	0.44	0.02	
9	105	106	"	"	<0.01	<0.01	
60	106	107	"	"	0.32	0.01	
1	107	108	"	"	0.41	0.02	
2	108	109	"	"	0.33	0.02	↑
3	109	110	"	"	0.20	0.01	
6364	110	111	"	"	0.20	0.01	

SPECIFIC GRAVITY

Determined by:

Depth (m):
Rock Type:
S.G. :

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/5

00 - 27.55 B Lens

0 - 3.6m

Garnet Pyroxene Hornfels

A grey-pale green weakly scheelite mineralised gph, being rubble throughout.

Note:

Although scheelite is present the core has not been split for assaying as (1) many assays are available for this interval from adjacent more northern holes on drill section 220 320E. (2) The cross - section would be "too crowded" if assays were draughted.

3.60 - 24.90 Brecciated, weakly leached Marble

A grey bedded barren ch. Core quality is poor to 10.3m (RQD = 10, J/M = +20) and improves to 24.90metres (RQD 79; J/M 2) but the entire interval is brecciated, weakly leached and contains numerous carbonate filled vughs.

Breccia: 3.70 - 3.80
7.3 - 9.5
15.2 -15.3
18.5 -18.6
Leached: 19.3 -22.3
Puggy: 3.6 -approx 10 metres
Fault Zone. adjacent.

24.90 - 27.55 Garnet Pyroxene Hornfels

A disturbed green - grey, weakly leached gph containing low grade scheelite mineralisation.

Note:

The core has not been split as mining in this region will probably never proceed owing to the in competent ground associated with the adjacent decline Fault zones.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/5

DECLINE FAULT ZONE

27.55 - 38.7 Broken Biotite Hornfels

A black barren, heavily fractured, brecciated and puggy biotite hornfels. Core is mostly rubble (RQD = 16, J/M = +20)

This interval probably represents part of the Decline Fault Zones.

The lower contact appears faulted at 32° to to LAOC. against pgh. Carbonate veining is also common here.

38.7 - 58.2 Pyroxene Garnet Hornfels

Typical pgh. Green ph groundmass containing white carbonate ovoids rimmed with brown grossular garnet. Weakly disseminated scheelite below 44.2metres - mostly sub ore grade.

58.2 - 84.4 Massive Garnet Hornfels

Medium grained brown andiadite garnet skarn containing abundant finely disseminated scheelite. Below 80metres the unit is finer grained, more pyroxene rich and contains less scheelite.

84.4 - 98.2 Marker Horizon (?)

A variety of essentially rock types as follows:

biotite pyroxene hornfels 84.4 - 88.5

Barren grey green hornfels

marble 88.5 - 98.2

Essentially a barren white marble containing occasional weakly disseminated scheelite in planes. -see assays.

98.2 - 104.3 Banded Garnet Hornfels

Typical fine to medium grained strongly banded andradite garnet skarn containing moderate disseminated scheelite.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. _____

104.3 - 120.8 Unmineralized Banded Footwall Beds

An essentially barren unit of interbedded white marble, grey green biotite and pyroxene and minor grossular and andradite garnet.

120.8 - 127.1 Lower Metavolcanics

Massive barren grey green biotite flecked metavolcanic.

127.1 metre EOH.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 320/5

LAB.	K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	HOLE No.
6303	0.92		6590	0.92		6591	1.10		6592	1.06		D 3205
6313	0.12		6587	0.08		6588	0.15		6589	0.15		"
6322	2.83		6584	2.92		6585	3.03		6586	2.88		"
6329	1.93		6593	1.82		6594	2.02		6595	1.83		"
6344	0.91		6647	0.79		6648	1.03		6649	0.90		"
6357	1.65		6644	1.36		6645	1.50		6646	1.44		"

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D320/4

PLANNING

Proposer: M. Danielson — **Depth:** 100m

Location: R.13 -150m R.L.

Purpose of hole: C lens oreblocking

Co-ordinates: 220 320 E 564 060 N
Inclination: -76°
Bearing 180° Grid **Magnetic:**
Target: E **Target Depth:**
N
Approved by: M.C. ROGERS **Date:** 1/7/77

SURVEY

Survey Co-ords: - E - N
Survey bearing: 201° 00' Grid **Magnetic:**
Surveyed in by: **Date:**
Actual Co-ords: 220 321.82 E 564 061.18 N
R.L. of Collar: R - 149.0 **Inclination of Hole:** -76° 30'
Picked up by: R.J.H. **Date:** 29/8/77

SUMMARY

Logged by: G.L. BUCKLAND
Results: Upper C lens 43 - 65m, 22m @ 2.04%
Lower C lens 65 - 85m, 20m @ 1.48%

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 28/7/77 **Date terminated:** 31/8/77

Casing:	**Size:**	HQ	NQ		
	Depth:	3.0	60.4		
Core:	**Size:**	HQ	NQ	BQ	
	Depth:	3.0	60.4	119.3	

Wedge Runoff:
Wedge placed: Nil **Depth:**
Proposed by: **Approved by:**
Reason:

Extension: Nil
Reason for termination: Hole entered footwall hornfels

Condition of hole on completion: **Final depth:** 119.3m
Casing:
Cemented:

Bore hole survey: Surveyed to 119.3m
Water: Normal water return throughout

Comments on drilling conditions: 14 days delay while drilling through the Decline Fault Zone.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D320/4

Survey method: Multishot camera
Final depth : 119.3m
Casing depth : NQ to 60.4m

Depth surveyed to: 119.3m
Date surveyed: 31/8/77
Surveyed by : L. DENBY
Checked by : G. BUCKLAND

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	W
21			15°	-75°			
42			14°45'	-75° 15'			
63	203° 30'	193° 30'	14°15'	-75° 15'			
87	206°	196°	13°15'	-76° 45'	84.30	20.90	5.12
105	209°	199°	13°45'	-76° 15'	101.78	24.99	6.47
119.3	210°	200°	13°45'	-76° 15'	115.67	28.18	7.63

NOTE: Bearing and inclination at 63m, down hole depth were used for calculations above this point.

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D320/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.0	3.0	2.07	69
4.6	1.6	1.52	95
7.1	2.5	2.5	100
10.1	3.0	2.74	91
13.1	3.0	3.00	100
16.1	3.0	2.94	98
19.1	3.0	3.02	101
22.1	3.0	2.86	95
25.1	3.0	2.82	94
28.1	3.0	0.82	27
29.5	1.4	1.05	75
31.1	1.6	Nil	zero
34.1	3.0	Nil	zero
37.1	3.0	Nil	zero
40.1	3.0	0.70	23
43.1	3.0	2.41	80
45.7	2.6	2.54	98
48.7	3.0	3.05	102
51.8	3.10	3.09	100
54.8	3.0	3.07	102
57.8	3.0	3.02	101
60.4	2.6	1.85	71
64.5	4.1	3.48	85
67.5	3.0	2.93	98
70.3	2.80	2.91	104
72.8	2.50	2.23	89
75.8	3.00	2.34	78
78.8	3.0	1.06	35
81.8	3.0	2.76	92
83.3	1.5	1.30	87
86.3	3.0	2.64	88
89.3	3.0	3.03	101
92.3	3.0	2.93	98
94.5	2.20	2.00	91
95.3	0.80	0.94	117
98.3	3.0	2.92	97
101.3	3.0	2.96	99
104.3	3.0	2.46	82
107.3	3.0	2.73	91
108.8	1.50	1.25	83
110.3	1.50	1.80	120
113.3	3.0	2.12	71
116.3	3.0	2.93	98
119.3	3.0	2.77	92

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No.D320/4

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 10.1	ch	+20		chlorite 0 - 2.5m; rest contain carbonate	6.5m: 40°	87	15	Rubble 0 - 2.50 3.50 - 4.90 5.5 - 6.4 7.0 - 7.2 8.25 - 9.00 Fractures are mainly parallel to bedding.
10.1 - 25.1	ch	2		carbonate	12m: 45° 20m: 45°	98	71	Faults - brecciated core: 13.9 - 14.45 20.41 - 21.57 Core weakly leached: 17.52 - 19.0
25.1 - 29.5	bh	+20		Minor pyrite chlorite		43	0	Fault: core brecciated throughout

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size. 0 - 3.00m HQ (approx. 63mm)
   3.00 - 60.4 NQ (approx. 47mm)
   60.4 - BQ (approx. 36mm)

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D320/4

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
								some 'intact' pieces of core but difficult to measure position as core loss is so substantial.
29.5 - 37.1	NO CORE RECOVERED _ FAULT ZONE							
37.1 - 41.0	bh	+20		Minor pyrite		15	0	Rubble
41.0 - 57.8	pgh/gh	2		clay		100	89	Good quality core - minor rubble: 45.55 - 45.7
57.8 - 86.3	gh/banded gh	4		Minor pyrite chlorite, clay	80m:52° 83m:45°	82	50	broken core: 60.4 - 60.7 (just commenced BQ.) also 74.8 - 75.0m 81.15 - 81.8 Most breaks are parallel to bedding.

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D320/4

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
86.3 - 101.3	bfb/lv	4		clay		99	57	Many breaks in core parallel to bedding. (i.e. Along bedding planes)
101.3 - 119.3	lv/bah	1		minor clay	109m:50° 114m:40° 119m:35°	89	28	The low RQD, reflects abundant breaks in core parallel to bedding. Rubble: 103.7 - 104.3

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size.

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/4

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo	
D6090	41	42	1.0	1.0	< 0.01	< 0.01	
1	42	43	"	"	0.23	0.01	
2	43	44	"	"	0.37	0.01	
3	44	45	"	"	2.29	0.09	
4	45	46	"	"	6.9	0.21	
5	46	47	"	"	2.30	0.07	
6	47	48	"	"	3.07	0.12	
7	48	49	"	"	1.84	0.08	Upper C lens
8	49	50	"	"	1.52	0.07	43 - 65
9	50	51	"	"	1.74	0.09	22m @ 2.04% WO_3
100	51	52	"	"	1.74	0.09	
1	52	53	"	"	1.55	0.08	
2	53	54	"	"	1.33	0.07	
3	54	55	"	"	1.54	0.06	
4	55	56	"	"	2.49	0.11	
5	56	57	"	"	1.46	0.04	
6	57	58	"	"	3.63	0.13	
7	58	59	"	"	3.47	0.12	
8	59	60	"	0.26	1.44	0.04	
9	60	61	"	1.0	3.59	0.12	
10	61	62	"	"	2.10	0.09	
1	62	63	"	"	0.55	0.02	
2	63	64	"	0.33	1.52	0.05	
3	64	65	"	1.0	1.43	0.04	
4	65	66	"	"	0.96	0.05	
5	66	67	"	"	2.10	0.11	
6	67	68	"	"	1.40	0.06	
7	68	69	"	"	2.92	0.12	
8	69	70	"	"	2.74	0.11	
9	70	71	"	"	2.22	0.09	
20	71	72	"	"	8.2	0.29	
1	72	73	"	0.72	7.0	0.25	
2	73	74		1.0	1.36	0.07	Lower C lens
3	74	75	"	0.60	0.58	0.04	65 - 85
4	75	76	"	0.75	2.25	0.09	20m @ 1.48% WO_3
5	76	79	3.0	1.05	1.64	0.07	
6	79	80	1.0	1.0	0.98	0.06	
7	80	81	"	"	0.86	0.06	
8	81	82	"	"	0.57	0.04	
9	82	83	"	"	0.54	0.03	
30	83	84	"	"	0.25	0.01	

SPECIFIC GRAVITY

Depth (m):
Rock Type:
S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/4

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D6131	84	85	1.0	1.0	0.28	0.01		
2	85	86	"	0.67	<0.01	< 0.01		
3	86	87	"	1.0	<0.01	< 0.01		
D6134	87	88	1.0	1.0	<0.01	< 0.01		

SPECIFIC GRAVITY

Determined by:

Depth (m):
Rock Type:
S.G. :

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/4

0 - 25.4 B LENS
Consisting of

0 - 2.50 Biotite Pyroxene Hornfels

A pale green-brown fractured bph containing isolated specks of sub ore grade scheelite mineralisation.

2.50 - 22.56 Marble

A bedded grey ch with minor grossularite development 6.6 - 6.8 m. Isolated specks of sub-grade scheelite throughout.

Fault 13.9 - 14.45
20.41 - 21.57

Within these intervals the brecciated rock fragments and groundmass are marble.

Core is weakly leached 17.52 - 19.00m.

22.56 - 25.40 Disturbed Pyroxene Grossular Hornfels

A pale green-brown disturbed pyroxene grossular hornfels with minor marble development:
24.6 - 24.8. Also minor sub grade scheelite 22.56 - 24.6.

25.40 - 29.50 BRECCIATED BIOTITE HORNFELS

A brecciated, rubbly black bh. Fault zones.

29.50 - 37.1 No core recovered. Assume core loss is due to the presence of the Decline Fault (and inexperienced drilling technique). Drillers report water at 29.5m.

37.1 - 41.0 BIOTITE HORNFELS

A grey bh, broken throughout.

41.0 - 44.67 PYROXENE GARNET HORNFELS

A white/grey podded unit having angular to sub rounded carbonate ovoids, commonly rimmed with grossular garnet, surrounded by a fine grained pyroxene rich groundmass containing scattered specks of scheelite mineralisation.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D320/4

44.67 - 65.5 GARNET HORNFELS

A grey, massive, fine grained andradite garnet hornfels containing high grade disseminated scheelite mineralisation throughout. Coarse scheelite is developed on joints at 44.8m and 48.3m.

The upper contact at this horizon is gradational with the pgh, but is located where abundant fine grained scheelite first appears.

59.55 - 59.70 - an interval of core containing abundant pyrite mineralisation.

65.5 - 85.43 BANDED GARNET HORNFELS

A bedded grey fine grained garnet hornfels containing medium to high grade scheelite mineralisation throughout.

The upper contact of this unit with the massive gh above, is gradational, however, it is placed at the end of uniformly disseminated fine grained scheelite mineralisation.

Core quality is good.

85.43 - 94.40 BANDED FOOTWALL BEDS

An interbedded (less than 15cm) sequence of black bh, white ch, minor green ph with minor grossularite development containing weak scheelite mineralisation.

80.45 - 80.55
92.46 - 92.53
93.0 - 93.15
The core has not been split in these last two intervals
Core commonly breaks along bedding planes.

94.4 - 95.5 BIOTITE PYROXENE HORNFELS

A thinly (less than 1cm) bedded black/grey bph, having pyrite as a joint coating.

95.5 - 96.46 BANDED FOOTWALL BEDS

A bedded (less than 10cm) ch with minor bh/ph. No scheelite mineralisation .

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D320/4

96.46 - 105.40 LOWER METAVOLCANICS

A massive, barren pale grey biotite flecked metavolcanics.

105.40 - 119.3 BEDDED BIOTITE ACTINOLITE HORNFELS
EOH

A thinly (1cm) bedded black (biotite) grey (actinolite) hornfels having minor ph interbeds in last 3m core. Breaks parallel to bedding are common.
Aplite: 109.96 - 110.68
Bedding - 109m 50° LAOC
114m 40° LAOC
119m 35° LAOC

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 320/4

LAB.	K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	HOLE No.
6095	2.30		6656	2.38		6657	2.52		6658	2.24		D 320/4
6100	1.74		6671	1.76		6672	1.85		6673	1.07		"
6114	0.96		6614	0.96		6615	1.31		6616	1.17		"
6125	1.64		6626	2.21		6627	1.70		6628	1.80		"

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. Dolphin 320/3

PLANNING

Proposer: M.J. Danielson **Depth:** 110m

Location: R.13 -150m R.L.

Purpose of hole: C lens oreblocking and locate Northern Boundary fault.

Co-ordinates: 220 320 E 564 065 N
Inclination: -46° **Magnetic:**
Bearing 360 Grid **Target Depth:** 55m
Target: E N
Approved by: M.C. ROGERS **Date:** 1-6-77

SURVEY

Survey Co-ords: E N
Survey bearing: 359° 10' Grid **Magnetic:**
Surveyed in by: **Date:**
Actual Co-ords: 220 320.61 E 564 064.54 N
R.L. of Collar: F - 1490 **Inclination of Hole:** -46° 20'
Picked up by: R.J.H. **Date:** 7/7/77

SUMMARY

Logged by: M. DANIELSON
Results: Upper C lens 78 - 88m, 10m @ 1.29% WO_3
Northern Boundary Fault @ 94m

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 30/6/77 **Date terminated:** 25/7/77

Casing:	**Size:**	HQ	NQ		
	Depth:	3.0	45.0		
Core:	**Size:**	NQ	BQ		
	Depth:	54	106.3		

Wedge Runoff:
Wedge placed: Nil **Depth:**
Proposed by: **Approved by:**
Reason:

Extension: Nil
Reason for termination: Hole north of Northern Boundary Fault

Condition of hole on completion: **Final depth:** 106.3
Casing: 3m HQ remains cemented in
Cemented: No
Bore hole survey: Multishot to 102m
Water: Making minor water

Comments on drilling conditions: Bad ground in Decline Fault zone

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 320/3

Survey method: Multishot camera

Final depth : 106.3m

Casing depth : 45.0m

Depth surveyed to: 102m

Date surveyed: 25/7/77

Surveyed by : L. Denby

Checked by : M.J.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	W
12	358	348	43	-47	15.25	14.11	3.00
42	358	348	42	-48	30.72	28.0	5.32
60	358	348	42	-48	44.04	39.85	7.84
81	359	349	42	-48	59.65	45.74	9.09
102	357	347	41.75	-48.25	75.31	67.30	13.49

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.9	2.9	1.5	52
6.6	3.7	3.7	100
9.6	3.0	3.0	100
12.6	3.0	3.0	100
15.3	2.7	2.4	89
18.6	3.3	2.1	64
21.6	3.0	3.0	100
24.6	3.0	3.0	100
27.6	3.0	3.0	100
30.6	3.0	2.95	98
33.3	2.7	2.5	93
36.3	3.0	2.9	97
38.1	1.8	2.1	117
39.6	1.5	1.3	87
42.6	3.0	2.3	77
45.6	3.0	1.0	33
48.6	3.0	1.8	60
51.6	3.0	3.0	100
54.0	2.4	2.0	83
57.4	3.4	2.9	85
60.4	3.0	3.0	100
63.4	3.0	3.0	100
66.4	3.0	2.6	87
69.4	3.0	2.9	97
72.15	2.75	2.6	95
75.25	3.1	3.1	100
76.9	1.65	1.65	100
79.9	3.0	2.95	98
82.9	3.0	3.0	100
85.9	3.0	2.95	98
88.9	3.0	2.95	98
91.9	3.0	2.95	98
94.9	3.0	2.50	83
97.9	3.0	3.0	100
100.9	3.0	3.0	100
103.7	2.8	2.8	100
106.3	2.6	2.2	85
EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. Dolphin 320/3

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 30.6	B lens	0 - 13m +20 13 + 4		carbonate		90	58	0 - 13m partially leached
30.6 - 48.6	bh	+20				77	27	
FAULT 41m - 48m	Significant core loss. Quality of core is rubble with some clay recemented breccia.							
48.6 - 60.4	bh	6		clay		92	51	Broken ground 59 - 60.4m
Possible fault	49.2 - 49.4 54.5 - 55.0							
60.4 - 85.9	pgh/gh	4		clay		97	83	
85.9 - 94.9	bph	to 91m 4 91 - 95 + 20		clay		93	61	
Northern Boundary Fault Zone			91 - 95m					
94.9 - 106.3	Q	15		clay		96	53	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size. 0 - 54.0 NQ 47.6 mms dia.
   54.0 - 106.3 BQ 36.5mms dia.

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 320/3

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5990	66.5	67.5	1.0	1.0	1.76	0.07		
5978	77	78	1.0	1.0	< 0.01	< 0.01		
9	78	79	"	"	0.37	0.03		
80	79	80	"	"	1.35	0.08		
1	80	81	"	"	2.00	0.08	Upper C lens:	
2	81	82	"	"	0.67	0.04	78 - 88m	
3	82	83	"	"	0.96	0.07	10m @ 1.29% WO_3	
4	83	84	"	"	3.14	0.15	- 0.08% Mo	
5	84	85	"	"	1.64	0.14		
6	85	86	"	"	0.82	0.06		
7	86	87	"	"	1.50	0.09		
8	87	88	"	"	0.49	0.02		
D5989	88	89	"	"	< 0.01	< 0.01		

SPECIFIC GRAVITY

Depth (m):
Rock Type:
S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 320/3

0.00 - 31.85 B LENS

Whole unit is basically a barren white grey marble.

Between 0 - 12m there is very weak development of green ph and brown grossular garnet with very weak disseminated scheelite. Unit is leached in this zone and would have little structural strength.

Below 12m quality of core is good with no apparent leaching. There is 36% core loss between 15.3 and 18.6m.

31.85 - 61.6 BIOTITE HORNFELS

This unit is a barren grey brown bh.

Core is moderately broken to 41.0m but between 41.0 - 48.0m core is rubble with significant % core lost. Some core recovered is a clay recemented breccia. This zone is probably the Decline Fault zone.

Other possible Faults occur at 49.2 - 49.4m
and 54.5 - 55.0m

61.6 - 79.0 PYROXENE GARNET HORNFELS

Typical pgh. Green diopside groundmass containing white carbonate pods up to 10cm dia. rimmed with pale brown grossular garnet.

Unit contains very minor disseminated scheelite and is sub ore grade.

Coarse scheelite at 66.9m.

79.0 - 87.0 GARNET HORNFELS

Medium grained andradite garnet hornfels. Unit becomes finer grained with increasing pyroxene towards base and contains decreasing mineralisation.

This gh unit grades into the disturbed biotite pyroxene unit, typical of the Northern Boundary Fault Zone.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 320/3

87.0 - 94.0	BIOTITE PYROXENE HORNFELS
	Disturbed barren grey green hornfels. Unit is heavily broken below 92m with montmorillonite on fracture surfaces.
94.0 - 106.3m EOH	QUARTZITE
	Pale grey massive barren quartzite. Heavily shattered 94 - 95m.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 320/3

LAB.	K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	HOLE No.
5980	1.35		6653	1.27		6654	1.44		6655	1.34		D 320/3
5986	0.82		6617	0.92		6618	0.95		6619	0.98		"

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 320/2

PLANNING

Proposer: M. Danielson **Depth:** 105 metres

Location: R.13 -150 m R.L.

Purpose of hole: C lens oreblocking to -250 metres R.L.

Co-ordinates:	220 320	E 564 063	N
Inclination:	-64°		**Magnetic:**
Bearing	360	Grid	**Target Depth:**
Target:		E	N
Approved by:	M.C.R.		**Date:** 14-2-77

SURVEY

Survey Co-ords:		E	N
Survey bearing:	2° 10'	Grid	**Magnetic:**
Surveyed in by:			**Date:**
Actual Co-ords:	220 318-59	E 564 064.80	N
R.L. of Collar:	F - 149.4		**Inclination of Hole:** -62° 30'
Picked up by:	R.J.H.		**Date:** 190477

SUMMARY

Logged by: M. Danielson

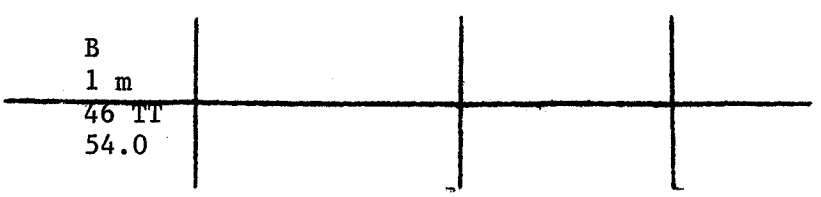
Results: No assays taken. Hole abandoned at 54 metres.

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 15-4-77 **Date terminated:** 23-4-77

Casing:	**Size:**	B
	Depth:	1 m
Core:	**Size:**	46 TT
	Depth:	54.0



Wedge Runoff:

Wedge placed: **Depth:**

Proposed by: **Approved by:**

Reason:

Extension: Nil

Reason for termination: Abandoned due to bent collar pipe

Condition of hole on completion: **Final depth:** 54.0 m

Casing: 1 m B remains .

Cemented: No

Bore hole survey: No

Water: Nil

Comments on drilling conditions: Hole abandoned when cuddy site fell in and required setting.

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.40	3.4	3.4	100
6.40	3.0	3.0	100
9.40	3.0	2.9	97
12.0	2.6	2.4	92
15.2	3.2	3.0	94
18.2	3.0	3.0	100
21.5	3.3	3.2	97
24.5	3.0	3.0	100
26.8	2.3	2.5	109
36.7	9.9	8.3	84
39.7	3.0	2.2	73
43.6	3.9	3.2	82
45.5	1.9	1.6	84
48.5	3.0	2.8	93
51.3	2.8	2.7	96
54.0 m EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/2

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 26.8	ch	5		carbonate	10m:30° 24m:40°	98	63	
26.8 - 43.6	bph	12		clay		81	34	Montmorillonite 38 - 41.5 metres.
42 - 43	clay	recemented breccia.						
43.6 - 51.3	bh	4		clay		92	65	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size.

46 TT = 34 mms dia.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/2

0 - 34.0 B lens

0 - 26.8 Marble

Barren grey ch occassional specks of scheelite 6.3 - 7.3 metres.

26.8 - 34.0 Biotite pyroxene hornfels

Barren grey brown and green bh, ph. Core is badly broken probably due to proximity of Decline Fault. Montmorillonite on fracture surfaces 38 - 41.5 metres and a clay recemented breccia 42-43 metres.

34.0 - 51.3 Biotite hornfels

Barren grey brown bh.

51.3 - 54.0 Pyroxene garnet hornfels

Typical pgh but contains many thin fractures and would have little structural strength.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. Dolphin 320/1

PLANNING

Proposer: M. Danielson — **Depth:**

Location: R.13 -150m R.L.

Purpose of hole: C ellens oreblocking

Co-ordinates:	220 320	E	564 063	N
Inclination:	-85°			**Magnetic:**
Bearing	360	Grid		**Target Depth:** 45m
Target:		E		N
Approved by:	M.C. Rogers			**Date:** 1/2/77

SURVEY

Survey Co-ords:	-	E		N
Survey bearing:		Grid		**Magnetic:**
Surveyed in by:				**Date:**
Actual Co-ords:	220 319.53	E	564 063.3	N
R.L. of Collar:	F-149.6			**Inclination of Hole:**
Picked up by:	R.J.H.			**Date:** 19/4/77

SUMMARY

Logged by: M. Danielson

Results: Upper C lens 42-62m 20m @ 2.47%
Lower C lens 67 - 86m 19m @ 1.47%

DRILLING

Driller/Contractor: A.D.D.
Progress delayed due to field hole drilling simultaneously.

Date commenced: 14/2/77 — **Date terminated:** 15/4/77

Casing:	**Size:**	HQ	
	Depth:	46m	BQ
Core:	**Size:**	NQ	
	Depth:	46	109.0

Wedge Runoff:

Wedge placed:	-	**Depth:**
Proposed by:		**Approved by:**
Reason:		

Extension: Nil

Reason for termination: Hole passed below Lower Metavolcanic unit.

Condition of hole on completion: **Final depth:** 109.0m

Casing: Nil
Cemented: No

Bore hole survey: Acid tube only Multishot U/S

Water: Minor trickle

Comments on drilling conditions: Hole drilled to 27m in BQ and couldn't penetrate decline fault. Redrilled in NQ.

D 320/1 is 0 — 27m in BQ.
D 320/1A was N° given to redrilled hole in NQ.
Both holes have same collar coords + bearing.

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 320/1A

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.4	3.4	2.4	71
6.5	3.1	3.1	100
9.5	3.0	3.0	100
12.5	3.0	3.0	100
13.1	0.6	0.6	100
16.1	3.0	3.0	100
19.1	3.0	3.0	100
22.1	3.0	2.9	97
25.1	3.0	1.10	37
28.1	3.0	1.70	57
30.7	2.6	1.6	62
34.1	3.4	1.6	47
37.1	3.0	0.5	17
40.1	3.0	3.0	100
43.1	3.0	3.0	100
49.0	5.9	5.0	85
52.0	3.0	2.95	98
55.0	3.0	2.98	99
58.0	3.0	3.0	100
61.0	3.0	3.0	100
64.0	3.0	2.87	96
67.0	3.0	2.95	98
69.4	2.4	2.4	100
73.0	3.6	3.8	105
75.5	2.5	2.6	104
77.5	2.0	1.85	92
79.0	1.5	1.63	109
82.0	3.0	2.95	98
85.0	3.0	3.15	105
88.0	3.0	3.05	102
91.0	3.0	3.0	100
94.0	3.0	3.0	100
97.0	3.0	3.10	103
100.0	3.0	3.0	100
103.0	3.0	3.0	100
106.0	3.0	3.0	100
109.0	3.0	3.0	100
EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D320/1A

Survey method : Acid Tube
Final depth : 109m
Casing depth : 46m

Depth surveyed to : 108m
Date surveyed : 12.4.78
Surveyed by : A.D.D.
Checked by : M.J.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
15m	-	-	86^0	86^c			
60m	-	-	87^o	85.5			
108m	-	-	87^o	85.5			

REMARKS: 15m depth reading is from multishot camera which became u/s below this depth.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 320/1A

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 --22.1	B lens ch	5		carbonate		95	77	
2.1 - 37.1	Decline Fault Zone bh	+20		clay		43	10	
37.1 - 43.1	bh	8		clay		58	100	
43.1 - 61.0	pgh gh	2		clay		95	92	
61.0 - 67.0	Marker	5		clay carbonate	64m: 40°	97	90	
67.0 - 85.0	banded gh	5		clay	69m: 30°	102	81	
85.0 - 103.0	bft lv	7		clay carbonate	87m: 40° 91m: 45° 98m: 50°	100	80	
103.0 - 109.0	bh/ph	+10		clay	107m: 55° 79m: 45°	100	58	

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $+= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size. NQ 0 - 46.0
   BQ 46.0 - 109.0m

GEOPEKO LIMITED - DOLPHIN

ASSAY DATA

D.D.H. No. D320/1A

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo	
D5604	42	43	1.0	1.0	0.42	< 0.01	
5	43	44	"	0.85	1.36	0.04	
6	44	45	"	0.85	2.62	0.08	
7	45	46	"	0.85	0.95	0.02	
8	46	47	"	0.85	2.85	0.09	
9	47	48	"	0.85	4.13	0.13	
10	48	49	"	0.85	5.83	0.22	
1	49	50	"	1.0	4.66	0.19	
2	50	51	"	1.0	4.10	0.10	
3	51	52	"	"	2.40	0.06	Upper C lens
4	52	53	"	"	3.19	0.10	42 - 62m
5	53	54	"	"	7.3	0.28	20m @ 2.47% WO_3
6	54	55	"	"	2.66	0.10	
7	55	56	"	"	1.34	0.05	
8	56	57	"	"	1.24	0.04	
9	57	58	"	"	3.54	0.12	
20	58	59	"	"	0.33	0.02	
1	59	60	"	"	4.12	0.14	
2	60	61	"	"	1.32	0.03	
3	61	62	"	0.9	1.18	0.03	
4	62	63	"	0.9	< 0.01	< 0.01	
5	63	64	"	1.0	0.08	< 0.01	
6	64	65	"	"	0.16	< 0.01	
7	65	66	"	"	< 0.01	< 0.01	
8	66	67	"	"	0.03	< 0.01	
9	67	68	"	"	0.37	0.01	
30	68	69	"	"	0.50	0.02	
1	69	70	"	"	0.60	0.02	
2	70	71	"	"	0.83	0.03	
3	71	72	"	"	1.60	0.07	
4	72	73	"	"	2.18	0.09	
5	73	74	"	"	1.42	0.07	
6	74	75	"	"	1.65	0.05	
7	75	76	"	"	4.85	0.18	Lower C lens
8	76	77	"	"	6.27	0.28	67 - 86m
9	77	78	"	"	2.20	0.08	19m @ 1.47% WO_3
40	78	79	"	"	1.00	0.05	
1	79	80	"	"	0.94	0.13	
2	80	81	"	"	4.75	0.22	
3	81	82	"	"	0.17	< 0.01	

SPECIFIC GRAVITY

Depth (m):
Rock Type:
S.G. :

Determined by:

GEOPEKO LIMITED - Dolphin cont.

ASSAY DATA

D.D.H. No. D 320/1A

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5644	82	83	1.0	1.0	0.72	0.02	Lower C lens	
5	83	84	"	"	0.54	0.01		
6	84	85	"	"	0.64	0.02		
7	85	86	"	"	0.62	0.02		
8	86	87	"	"	< 0.01	< 0.01		
D5649	87	88	"	"	< 0.01	< 0.01		

SPECIFIC GRAVITY

Determined by:

Depth (m):
Rock Type:
S.G. :

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 320/1

LAB.	K.I.S.		LAB.	K.I.S.		LAB.	A.M.D.E.L.		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
D5605	1.36	0.0	D5923	1.05		D5924	1.56		D5925	1.35		
5612	4.10	0.1	5926	4.03		5927	4.10		5928	3.66		
5629	0.37	0.0	5929	0.31		5930	0.45		5931	0.42		
5643	0.17	0.0	5932	0.12		5933	0.25		5934	0.20		
5647	0.62	0.0	5935	0.64		5936	0.78		5937	0.76		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 320/1A

00 - 22.1	B LENS MARBLE. Completely barren pale white grey marble. Quality of cores good.
22.1 - 37.1	DECLINE FAULT ZONE. Core is mostly broken biotite hornfels. Coreloss in this section is 57%.
37.1 - 41.8	BIOTITE HORNFELS. Barren fine grained grey brown biotite hornfels.
41.8 - 47.0	PYROXENE GARNET HORNFELS. Fine to medium grained green pyroxene and brown andradite garnet rock. Minor grossular garnet. Occasional carbonate pods but generally less than 1cm dia. Mineralisation mostly as coarse scheelite below 43.5m.
47.0 - 61.0	GARNET HORNFELS. Fine to medium grained andradite garnet skarn. High grade finely disseminated scheelite plus some coarse scheelite. Below 58m some biotite and pyroxene and minor grossular hornfels appear and grade is lower in this section.
61.0 - 67.0	MARKER HORIZON. A variety of rock types as follows: garnet pyroxene hornfels 61 - 63m biotite hornfels 63 - 64.5m marble 64.5 - 66.5m garnet pyroxene hornfels 66.5 - 67m. There is very minor mineralisation in the gph intervals.
67.0 - 86.0	BANDED GARNET HORNFELS. Typical banded garnet hornfels of the lower C lens. Scheelite is finely disseminated in the andradite garnet beds leaving barren the

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D320/1A

67.0 - 86.0	BANDED GARNET HORNFELS. interbedded biotite and pyroxene beds. Grade is low to 70 [redacted] but medium to high 70 — 86.m.
86.0 - 99.5	BANDED FOOTWALL BEDS. Barren intersedded white marble, biotite and pyroxene hornfels. Minor grossular garnet. The unit is dominantly marble to 94m but is richer in biotite between 94 - 99.5m.
99.5 - 104.0	LOWER METAVOLCANICS. Pale greenish brown massive fine grained rock with abundant brown flecks of biotite. No mineralisation.
104.0 - 109.0	BIOTITE PYROXENE HORNFELS Thinly bedded green brown pyroxene biotite hornfels. No mineralisation. 109.0m EOH.