GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/13

PLANNING

PROPOSER: R.E.S. Davies DEPTH: 50 m

LOCATION: S10 -240 m Level

PURPOSE OF HOLE: Test Granite East of Decline Fault

PROPOSED CO-ORDS: 220 370 E 563 965 N

INCLINATION: -90

BEARING: 0 °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 192° 38' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 364.2 E 563 967.9 N

R.L. OF COLLAR: -240.10

INCLINATION OF HOLE: -88° 24'

PICKED UP BY: J. Cook DATE: 13/5/81

SUMMARY

LOGGED BY: R.E.S. Davies

RESULTS: Hole abandoned

DRILLING

DATE COMMENCED: 14/4/81 DATE TERMINATED: 24/4/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 56TT
DEPTH: 13.5

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 13.5 m

REASON FOR TERMINATION: Abandoned in bad ground

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 360/13

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.5	1.5	0.6	40
1.5 - 2.0	0.5	0.3	60
2.0 - 4.9	2.9	2.9	100
4.9 - 6.5	1.6	1.5	94
6.5 - 9.1	2.6	2.4	92
9.1 - 9.5	0.4	0.3	75
9.5 - 12.2	2.7	2.3	85
12.2 - 13.3	1.1	0.8	73
13.3 - 13.5	0.2	0.1	50
EOH 13.5 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/13

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 - 13.5	bh	6>20		chlor			20	2.7 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

GEOLOGICAL LOG

D.D.H. No. D 360/13

0.0 - 13.5 m SHEARED BIOTITE HORNFELS

The lithology is biotite hornfels throughout. Up to 9.1 m the core is competant and is recovered in lengths of 5 - 30 cm there is a strong fabric @ 25° to LCA. Beyond 9.1 m the core is broken, mostly fragments are around 5 cm long, but range from 2-10 cm.

Small amounts of pyroxene hornfels are present in the core with a concentration @ 8 - 9 m. All broken surfaces are lined with chlorite.

The hole was abandoned @ 13.5 m due to caving.

EOH 13.5 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/12

PLANNING

PROPOSER: S. G. Brown DEPTH: 200 m

LOCATION: S10 drive -240 m level

PURPOSE OF HOLE: Test Lower contact of Upper volcanics East of the Grassy River Fault.

PROPOSED CO-ORDS: 220 362 E 563 970 N

INCLINATION: -60°

BEARING: 090° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 85° 04' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 362.3 E 563 969.4 N

R.L. OF COLLAR: -240.5

INCLINATION OF HOLE: -57° 33'

PICKED UP BY: J. Cook DATE: 25/9/80

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS:

DRILLING

DATE COMMENCED: 18/9/80 DATE TERMINATED: 2/4/81

DRILLER/CONTRACTOR: S. Batchelor/ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: HQ BQ AQ
DEPTH: 337 351.3

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 351.3

REASON FOR TERMINATION: Abandoned in broken ground

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: M/s

WATER:

COMMENTS ON DRILLING CONDITIONS: Poor

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
000.00 - 005.5	5.5	5.4	98
5.5 - 7.0	1.3	1.3	100
7.0 - 8.5	1.5	.15	100
8.5 - 10.0	1.5	1.62	108
10.0 - 11,5	1,5	1.48	99
11.5 - 14.5	3.0	3.0	100
14.5 - 17.5	3.0	3.0	100
17.5 - 20.5	3.0	3.0	100
20.5 - 23.0	2.5	2.5	100
23.0 - 26.5	3.5	3.5	100
26.5 - 29.5	3.0	3.0	100
29.5 - 32.5	3.0	3.0	100
32.5 - 35.0	2.5	2.5	100
3.50 - 38.0	3.0	3.0	100
38.0 - 41.0	3.0	2.95	98
41.0 - 42.0	1.0	1.0	100
42.0 - 45.7	3.7	2.35	64
45.7 - 48.5	2.8	1.23	44
48.5 - 49.1	.6	.48	80
49.1 - 50.2	1.1	.61	55
50.2 - 50.7	.5	.2	40
50.7 - 51.1	.4	.32	80
51.1 - 51.3	.2	.2	100
51.3 - 51.7	.4	.2	50
51.7 - 52.3	.6	.16	27
52.3 - 53.4	1.1	.9	82
53.4 - 54.8	1.4	1.6	94
54.8 - 56.4	1.6	1.51	94
56.4 - 57.7	1.3	1.3	100
57.7 - 59.5	1.8	1.4	78
59.5 - 61.0	.5	.5	100
61.0 - 62.5	1.5	.75	50
62.5 - 64.0	1.5	.3	20
64.0 - 65.5	1.5	.99	66
65.5 - 67.0	1.5	1.4	93
67.0 - 68.5	1.5	1.5	100
68.5 - 69.4	.9	.9	100
69.4 - 70.0	.6	.47	78
70.0 - 70.7	.7	.7	100
70.7 - 71.3	.6	.6	100
71.3 - 72.0	.7	.32	46
72.0 - 72.4	.4	.4	100
72.4 - 73.0	.6	.6	100
73.0 - 74.5	1.5	.7	47
74.5 - 76.0	1.5	1.5	100
76.0 - 77.5	1.5	.48	32
77.5 - 78.5	1.0	.6	60
78.5 - 79.0	.5	.5	100
79.0 - 80.3	1.3	.83	64
80.3 - 81.7	1.4	.5	36
81.7 - 82.8	1.1	1.1	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
82.8 - 83.5	.7	.7	100
83.5 - 84.0	.5	.5	100
84.0 - 85.0	1.0	.66	66
85.0 - 86.5	1.5	.5	33
86.5 - 88.5	2.0	1.28	64
88.5 - 89.5	1.0	1.0	100
89.5 - 91.0	.5	.5	100
91.0 - 92.2	1.2	1.2	100
92.2 - 93.5	.13	1.3	100
93.5 - 94.0	.5	.5	100
94.0 - 94.6	.6	.6	100
94.5 - 96.3	1.7	1.7	100
96.3 - 97.0	.7	.7	100
97.0 - 98.5	1.5	1.46	97
98.5 - 100.0	1.5	1.4	93
100.0 - 101.5	1.5	1.3	87
101.5 - 103.0	1.5	1.13	75
103.0 - 104.5	1.5	0	0
104.5 - 106.0	1.5	0	0
106.0 - 107.2	1.2	.49	41
107.2 - 109.0	1.8	1.6	89
109.0 - 110.2	1.2	.83	69
110.2 - 112.0	1.8	1.77	98
112.0 - 114.8	2.8	2.76	99
114.8 - 115.5	.7	.7	100
115.5 - 116.5	1.0	1.0	100
116.5 - 118.0	1.5	.75	50
118.0 - 119.5	1.5	1.33	89
119.5 - 121.0	1.5	1.5	100
121.0 - 122.5	1.5	1.5	100
122.5 - 124.0	1.5	1.5	100
124.0 - 125.4	1.4	1.4	100
125.4 - 127.0	1.6	1.8	100
127.0 - 130.0	3.0	2.16	72
130.0 - 131.5	1.5	1.8	120
131.5 - 132.8	1.3	1.32	102
132.8 - 133.6	.8	.81	101
133.6 - 134.6	.9	.9	100
134.5 - 136.0	1.5	1.04	69
136.0 - 138.5	2.5	2.5	100
138.5 - 139.0	.5	.5	100
139.0 - 139.6	.6	.6	100
139.6 - 140.5	.9	.3	33
140.5 - 142.0	1.5	1.08	72
142.0 - 143.5	1.5	1.01	67
143.5 - 145.0	1.5	.95	63
145.0 - 146.2	1.2	1.2	100
146.2 - 148.0	1.8	1.59	88
148.0 - 149.5	1.5	.72	48
149.5 - 150.0	.5	.27	54
150.0 - 151.0	1.0	.69	69

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
151.0 - 152.2	1.2	.7	58
152.2 - 152.3	.1	.1	100
152.3 - 153.3	1.0	1.01	101
153.3 - 153.7	.4	.4	100
153.7 - 155.3	1.6	1.6	100
155.3 - 156.0	.7	.21	30
156.0 - 156.6	.6	.3	50
156.6 - 157.7	1.1	1.1	100
157.7 - 158.5	.8	.8	100
158.5 - 160.0	1.5	1.24	83
160.0 - 161.5	1.5	1.5	100
161.5 - 162.3	.8	.8	100
162.3 - 163.9	1.6	1.6	100
163.9 - 164.5	.6	.6	100
164.5 - 166.0	1.5	1.5	100
166.0 - 167.2	1.2	.76	63
167.2 - 169.0	1.8	1.17	65
169.0 - 170.0	1.0	.32	32
170.0 - 171.0	1.0	.81	81
171.0 - 171.7	.7	.33	47
171.7 - 172.0	.3	.25	83
172.0 - 173.5	1.5	1.31	87
173.5 - 174.0	.5	.45	90
174.0 - 174.7	.7	.58	83
174.7 - 176.5	1.8	1.8	100
176.5 - 178.0	1.5	1.5	100
178.0 - 179.5	1.5	1.5	100
179.5 - 181.0	1.5	1.3	87
181.0 - 182.2	1.2	1.05	88
182.2 - 184.7	1.5	1.5	100
184.7 - 185.5	.8	.8	100
185.5 - 187.0	1.5	1.5	100
187.0 - 188.5	1.5	1.5	100
188.5 - 190.0	1.5	1.45	97
190.0 - 191.5	1.5	1.5	100
191.5 - 193.0	1.5	1.5	100
193.0 - 194.5	1.5	1.5	100
194.5 - 197.5	3.0	3.0	100
197.5 - 198.7	1.2	1.2	100
198.7 - 200.5	2.3	1.89	82
200.5 - 202.0	1.5	1.5	100
202.0 - 203.3	1.3	1.3	100
203.3 - 204.3	1.0	1.0	100
204.3 - 205.0	.7	.7	100
205.0 - 206.5	1.5	1.5	100
206.5 - 208.0	1.5	1.5	100
208.0 - 209.5	1.5	1.5	100
209.5 - 211.0	1.5	1.5	100
211.0 - 212.3	1.3	1.24	95
212.3 - 214.0	1.7	1.7	100
214.0 - 215.5	1.5	1.5	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
215.5 - 217.0	1.5	1.5	100
217.0 - 218.5	1.5	1.5	100
218.5 - 220.0	1.5	1.42	95
220.0 - 221.5	1.5	1.5	100
221.5 - 222.7	1.2	1.2	100
222.7 - 224.5	1.8	1.8	100
224.5 - 226.0	1.5	.15	100
226.0 - 227.5	1.5	1.5	100
227.5 - 227.8	.3	.3	100
227.8 - 228.8	1.0	1.0	100
228.8 - 230.5	1.7	1.64	96
230.5 - 232.0	1.5	1.5	100
232.0 - 233.5	1.5	1.5	100
233.5 - 235.0	1.5	1.5	100
235.0 - 236.5	1.5	1.5	100
236.5 - 238.0	1.5	1.5	100
238.0 - 239.5	1.5	1.5	100
239.5 - 241.0	1.5	1.5	100
241.0 - 244.0	3.0	3.0	100
244.0 - 247.0	3.0	3.0	100
247.0 - 248.0	1.0	1.0	100
248.0 - 250.0	2.0	1.9	95
250.0 - 251.5	1.5	1.5	100
251.5 - 253.0	1.5	1.38	92
253.0 - 254.0	1.0	1.0	100
254.0 - 255.2	1.2	1.2	100
255.2 - 256.0	.8	.8	100
256.0 - 259.0	3.0	3.0	100
259.0 - 262.0	3.0	3.0	100
262.0 - 265.0	3.0	3.0	100
265.0 - 268.0	3.0	3.0	100
268.0 - 269.3	1.3	1.3	100
269.3 - 271.0	1.7	1.7	100
271.0 - 271.5	.5	.42	84
271.5 - 271.7	.2	.1	50
271.7 - 273.5	1.8	1.7	94
273.5 - 27.40	.5	.5	100
274.0 - 275.0	1.0	.98	98
275.0 - 277.0	2.0	2.0	100
277.0 - 278.5	1.5	1.2	80
278.5 - 280.0	1.5	0.5	33
280.0 - 281.0	1.0	0.6	60
281.0 - 283.0	2.0	2.0	100
283.0 - 284.5	1.0	0.9	90
284.5 - 284.0	0.5	0.2	40
285.0 - 286.0	1.0	0.4	40
296.0 - 286.5	0.5	0.5	100
286.5 - 287.5	1.0	0.6	60
287.5 - 289.0	1.5	0.1	7
289.0 - 290.5	1.5	0.3	2
290.5 - 291.4	0.9	0.9	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
291.4 - 292.0	0.6	0.6	100
292.0 - 294.2	2.2	2.2	100
294.2 - 295.0	0.8	0.8	100
295.0 - 298.0	3.0	3.0	100
298.0 - 301.0	3.0	3.0	100
301.0 - 304.0	3.0	3.0	100
304.0 - 307.0	3.0	3.0	100
307.0 - 310.0	3.0	3.0	100
310.0 - 313.0	3.0	3.0	100
313.0 - 316.0	3.0	3.0	100
316.0 - 319.0	3.0	3.0	100
319.0 - 322.0	3.0	3.0	100
322.0 - 325.0	3.0	3.0	100
325.0 - 328.0	3.0	3. 0	100
328.0 - 330.8	2.8	2.8	100
330.8 - 334.0	3.2	3.2	100
334.0 - 337.0	3.0	3.0	100
337.0 - 340.5	3.5	3.4	97
340.5 - 343.0	2.5	2.5	100
343.0 - 346.0	3.0	3.0	100
346.0 - 349.0	3.0	3.0	100
349.0 - 351.0	2.0	2.0	100
351.0 - 351.3	0.3	0.2	67
EOH 351.3 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/12

0.00 - 44.0 m — SHEARED BIOTITE HORNFELS

Generally highly broken and fractured core mostly recovered in pieces 5 - 10 cm long. Fragments are angular, and broken surfaces are faced by chlorite slickenslides. From 9 - 12 m, lengths of core up to 30 cm were recovered.

The lithology is biotite hornfels containing a strong shear fabric @ 25° to LCA. This fabric is deliniated by elongate blebs of pyroxene hornfels and feldspars 0.5 to 2 cm long. Sulphides are rarely present. Large patches of felsic rock areas occur locally @ 17 m and 30 m. Beyond 25 m the shear fabric is less intense and the rock has a more even fine grained texture of biotite hornfels/pyroxene hornfels. Metamorphic spotting is present in the last few metres.

44.0 - 57.0 — SHEARED PYROXENE HORNFELS

Highly sheared pyroxene hornfels with a dull grey green colour and a fabric @ 30° to LCA.

The core is highly broken but appears less brittle and more crumbly than the biotite hornfels. Towards the end of the unit biotite hornfels becomes more prominent.

57.0 - 66.0 — FAULT ZONE

A region of totally degraded rock, virtually all the core recovered is sand and gravel sized fragments of ?biotite hornfels/pyroxene hornfels with a clay matrix.

66.0 - 95.0 — RECEMENTED BRECCIA

A badly broken unit, particularly from 70 - 76 m. It consists of angular clasts 0.5 - 3 cm in diameter cemented together be a mixture of pink potash Feldspar, calcite and ?epidote. The interval 70 - 76 m is probably a zone of incomplete or degraded cementing.

The clast lithology is a dull grey blue biotite hornfels.

95.0 - 351.3 — VOLCANICS

As a whole this rock type can be described as probably being a succession of amygdaloidal leaves alternating with volcanic breccia.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/12

Most of the core is extremely broken, generally in fragments of about 5 cm, although the ground generally improves down the hole becoming particulary good from about 260 m to 326 m. The amygdales are mainly composed of pink K. Feldspar and range in size from 0.5 to 5 cm. Locally epidote and minor calcite are present.

Individual features of the unit are:

143 - 145 and 107 - 111 is epidote rich and has few amygdales.

122 - 123, 137 - 145, 151 - 153 m, badly broken core with some slickenslides and occasional clay/gravel mix of decomposed rock.

175 - 186, 194 - 202 m, good core, sticks up to 20 cm.

187 - 188 and 192 Decomposed core now consisting of clay/sand/gravel. Between these two intervals the core has no amygdales but carries abundant black metamorphic spotting. Amygdales not present from 178 - 186 m and from 203 - 214 m.

166 - 173 m Heavily epidotised

204.9 m Analcite crystals present

225 - 226 m, 230 - 237 m, 238 - 242 m, 248 - 258 m, No amygdales present

212.2 m 10 cm of clay/sand/gravel

217.3 m Recemented breccia.

233 - 236 m, 255 - 257 m Fractured and broken core.

Below 258 m amygdales only occur from 256 - 273 m, and sparsly @ 317 - 325 m.

298 - 326 m very good core, sticks up to 50 cm long, generally 20 cm.

271 - 288 m Broken core, fragments <5 cm.

325 - 328 ? volcanogenic breccia, angular 1 cm clasts.

EOH 351.3 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/11

PLANNING

PROPOSER: S. G. Brown DEPTH: 30 m

LOCATION: S10 Drive

PURPOSE OF HOLE: To test for B lens

PROPOSED CO-ORDS: 220360.0E 563975.0 N

INCLINATION: -60^{o}

BEARING: 090^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown DATE: 7/11/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 94^{o} 28' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220360.8 E 563968.8 N

R.L. OF COLLAR: F-240.2

INCLINATION OF HOLE: -59^{o} 20'

PICKED UP BY: R. Howman DATE: 12/11/79

SUMMARY

LOGGED BY: W. Black

RESULTS: No significant mineralisation

DRILLING

DATE COMMENCED: 8/11/79 DATE TERMINATED:

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 40 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/11

Surveyed method: Multishot
Final depth: 40.00 m
Casing depth: 1.50 m

Depth surveyed to: 40.00
Date surveyed: 15/11/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	E
16.00	96°	86°	30° 15'	-59° 45'	13.82	.56	8.04
25.00	95°	85°	30°	-60°	21.61	.95	12.52
40.00	95°	85°	30°	-60°	34.60	1.60	19.99

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/11

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.10 m	2.10	1.35	64.29
2.10 - 3.70	1.60	1.10	68.75
3.70 - 4.80	1.10	0.75	68.18
4.80 - 5.80	1.00	0.60	60
5.80 - 7.50	1.70	1.70	100
7.50 - 8.22	0.72	0.72	100
8.22 - 8.90	0.68	0.68	100
8.90 - 9.90	1.00	1.00	100
9.90 - 11.50	1.60	1.60	100
11.50 - 12.60	1.10	1.10	100
12.60 - 13.20	0.60	0.60	100
13.20 - 14.20	1.00	1.00	100
14.20 - 15.60	1.40	1.40	100
15.60 - 18.50	2.90	2.90	100
18.50 - 18.60	0.10	0.10	100
18.60 - 20.00	1.40	1.22	87.14
20.00 - 21.50	1.50	1.50	100
21.50 - 22.60	1.10	1.10	100
22.60 - 23.76	1.16	1.16	100
23.76 - 24.50	0.74	0.74	100
24.50 - 25.80	1.30	1.30	100
25.80 - 27.60	1.80	1.80	100
27.60 - 29.20	1.60	1.60	100
29.20 - 30.80	1.60	1.50	93.75
30.80 - 31.50	0.70	no core	0
31.50 - 32.40	0.90	no core	0
32.40 - 33.00	0.60	0.51	85
33.00 - 33.70	0.70	0.70	100
33.70 - 34.40	0.70	0.70	100
34.40 - 35.00	0.60	0.60	100
35.00 - 36.30	1.30	1.30	100
36.30 - 36.80	0.50	0.50	100
36.80 - 36.90	0.10	0.10	100
36.90 - 37.80	0.90	0.87	96.67
37.80 - 39.00	1.20	1.20	100
39.00 - 39.60	0.60	0.60	100
39.40 - 40.00	0.40	0.16	40
EOH 40.00 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/11

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 - 40.0	bh	9-12		Some clay calcite.	-	89.40	33.65	

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) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/11

0.0 - 40.00 m BIOTITE HORNFELS

A dark brown to black rock, fairly massive, with a few small zones of pyroxene-rich and calcite-rich material, as well as some calcite veins. No scheelite mineralisation, with the exception of a couple of specks between approximately 10 and 17 m. There is a small amount of pyrite. At 15.5 m, there is some white spotting, which is probably due to feldspar aggregates.

Possible faults occur at:

0.0 - 2.1 m	Generally broken core with some clay.
5.7 - 5.8 m	Broken core
13.4 - 14.0 m	Broken core with clay
14.15 - 14.3 m	Broken core
17.5 m	" "
21.0 - 21.5 m	Broken core with some clay.
22.0 - 22.5 m	Broken core
24.5 m	" "
25.4 m	" "
27.5 - 27.6 m	Broken core with clay.
29.0 - 29.2 m	Highly broken core
30.4 - 30.8 m	Highly broken core with clay.
30.8 - 32.4 m	No core
32.4 - 33.0 m	Highly broken core
33.4 - 33.7 m	Highly broken core with clay.
34.3 - 34.4 m	Broken core
34.8 - 35.0 m	Highly broken core
35.7 - 36.9 m	Very highly broken core
37.8 m	" " " "
38.0 - 39.6 m	Rubbly core.
39.6 - 40.0 m	Highly broken core with low core recovery.

EOH 40.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/10

PLANNING

PROPOSER: S. G. Brown DEPTH: 100 m

LOCATION: S10 -240 m R.L. Drive

PURPOSE OF HOLE: To test Grassy River Fault zone.

PROPOSED CO-ORDS: 220 361.5 E 563968.0 N

INCLINATION: -10^{o}

BEARING: 090 ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown DATE: 10/10/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 94^{o} 10' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 361.6 E 563968.9 N

R.L. OF COLLAR: W-239.5

INCLINATION OF HOLE: -9^{o} 5'

PICKED UP BY: R. Howman DATE: 30/10/79

SUMMARY

LOGGED BY:

RESULTS:

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 42.30

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 42.30 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not surveyed

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/10

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 4.8 m	4.8	3.4	70.83
4.8 - 7.0	2.2	2.2	100
7.0 - 8.15	1.15	1.15	100
8.15 - 9.9	1.75	1.75	100
9.9 - 13.0	3.1	3.1	100
13.0 - 14.6	1.6	1.6	100
14.6 - 16.0	1.4	1.4	100
16.0 - 18.5	2.5	2.4	96.0
18.5 - 19.8	1.3	0.95	73.08
19.8 - 20.6	0.8	0.17	21.25
20.6 - 22.0	1.4	0.37	26.43
22.0 - 23.6	1.6	0.80	50.00
23.6 - 25.1	1.5	0.26	17.33
25.1 - 26.6	1.5	0.12	8.00
26.6 - 28.0	1.4	0.33	23.57
28.0 - 29.0	1.0	0.53	53.00
29.0 - 29.4	0.4	0.40	100
29.4 - 30.0	0.6	0.6	100
30.0 - 30.6	0.6	0.6	100
30.6 - 31.8	1.2	1.2	100
31.8 - 32.8	1.0	1.0	100
32.8 - 33.5	0.7	0.7	100
33.5 - 34.0	0.5	0.5	100
34.0 - 35.3	1.3	0.28	21.54
35.3 - 36.8	1.5	0.70	46.67
36.8 - 38.0	1.2	0.34	28.33
38.0 - 39.0	1.0	0.44	44.00
39.0 - 40.7	1.7	0.34	20.00
40.7 - 41.3	0.6	0.3	50.00
41.3 - 41.8	0.5	0.14	28.00
41.8 - 42.3	0.5	0.30	60.00
EOH			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/10

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)
0.00 - 19.00	bh	10-15	55-60°			91.89	15.79	3 m
19.00 - 42.30	breccia	00		Clay, chl		48.80	1.97	.46 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

GEOLOGICAL LOG

D.D.H. No. D 360/10

0.00 - 19.0 m BIOTITE HORNFELS

A dark brown coloured rock with occasional green pyroxene patches and calcite veins. No scheelite mineralization, but some pyrite present.

Areas of broken, faulted material occur at:

0.0 - 0.9 m, 2.7 m, 4.2 m, 6.1 - 6.5 m, 10.0 - 10.4 m, 14.5 - 14.6 m, 16 m, 16.3 - 16.5 m, 17.9 m and 18.4 m.

19.00 - 42.3 FAULT ZONE (Grassy River Fault?)

Generally broken, clayey and highly micaceous material. Very little calcite; no mineralization, but some pyrite present. Very high core loss (see core recovery Table)

Major areas within fault zone:

23.6 - 25.1 m. Extremely high core loss: only a little clay recovered (probably from drilling process).
29.5 - 33.5 m Highly chloritized, recemented (?) material.
33.5 - 42.3 m Highly broken material, often as small as fine sand-sized particles.

* It should be noted that there is very little shearing apparent in this fault zone.

EOH 42.3 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/9

PLANNING

PROPOSER: S. G. Brown DEPTH: 55 m

LOCATION: S13 Drive

PURPOSE OF HOLE: To Test B Lens Above S13

PROPOSED CO-ORDS: 220360.0E 564060.0 N

INCLINATION: +45°

BEARING: 360° °GRID °MAG

TARGET: E N

DEPTH: 45 m

CHECKED BY: S. G. Brown DATE: 16/9/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 356° 50' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220359.9 E 564059.5 N

R.L. OF COLLAR: B-198.5

INCLINATION OF HOLE: +47° 50'

PICKED UP BY: R. Howman DATE: 20/9/79

SUMMARY

LOGGED BY: W. Black

RESULTS:

0 m - 6 m	6m	@	0.48%
12 m - 15 m	3m	@	0.94%
20 m - 21 m	1m	@	0.46%

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 42.00 m

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 42.00 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not Surveyed

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/9

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 0.10	0.10	-	No Core
0.10 - 2.70	2.60	2.60	100
2.70 - 5.70	2.00	2.00	100
5.70 - 7.35	1.65	1.65	100
7.35 - 7.80	0.45	0.45	100
7.80 - 10.50	2.70	2.70	100
10.50 - 12.00	1.50	1.50	100
12.00 - 14.00	2.00	2.00	100
14.00 - 14.24	0.24	0.24	100
14.24 - 16.00	1.76	1.76	100
16.00 - 17.80	1.80	1.80	100
17.80 - 20.20	2.40	2.40	100
20.20 - 21.16	0.96	0.96	100
21.16 - 23.20	1.94	1.94	100
24.20 - 26.20	3.00	3.00	100
26.20 - 28.30	2.10	2.10	100
28.30 - 28.60	0.30	0.30	100
28.60 - 29.20	0.60	0.60	100
29.20 - 30.10	0.90	0.90	100
30.10 - 30.80	0.70	0.70	100
30.80 - 31.60	0.80	0.80	100
31.60 - 33.40	1.80	1.80	100
33.40 - 34.00	0.60	0.60	100
34.00 - 34.87	0.87	0.62	71
34.87 - 35.20	0.33	0.33	100
35.20 - 35.80	0.60	0.60	100
35.80 - 35.40	0.60	0.60	100
36.40 - 36.90	0.50	0.50	100
36.90 - 39.20	2.30	2.30	100
39.20 - 40.00	0.80	0.63	79
40.00 - 40.90	0.90	0.90	100
40.90 - 42.00	1.10	0.60	54.5
EOH 42.00			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 360/9

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 11640	0	1	1.0	1.0	0.62			
41	1	2	"	"	0.72			
42	2	3	"	"	0.39			
43	3	4	"	"	0.20			
44	4	5	"	"	0.13			
45	5	6	"	"	0.80			
46	6	7	"	"	<0.01			
47	10	11	"	"	<0.01			
48	11	12	"	"	<0.01			
49	12	13	"	"	0.46			
50	13	14	"	"	1.27			
51	14	15	"	"	1.10			
52	15	16	"	"	0.09			
53	16	17	"	"	0.01			
54	17	18	"	"	0.46			
55	21	22	"	"	0.14			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/9

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)
0.1 - 3.7	Bh/ch	10		Clay		100	74.05	First 0.1 m core lost
3.7 - 6.1	Ph/ch	8	28°	Clay		100	55.50	
6.1 - 12.0	Marble	6-7		Clay		100	65.71	
12.0 - 15.1	Ph/bh	5		Clay		100	86.45	
15.1 - 20.0	Bh/ph	11-12	20°	Clay		100	56.12	
20.0 - 26.2	Ph	3-5		Clay		100	81.61	
26.2 - 42.0	Ph/bh	10		Clay		90	34.18	
EOH 42.0 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) $+= \frac{\text{Length Core} > 10 \text{ cm}}{\text{Length Drilled}}$
3. Core size.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/9

0.1 - 3.7 m BIOTITE HORNFELS/CALCITE HORNFELS

A massive biotite hornfels with calcite, both in the rock and in veins low to medium grade disseminated scheelite mineralisation.

3.1 m Sheared material (fault).

3.7 - 6.1 PYROXENE HORNFELS/CALCITE HORNFELS

A green/grey coloured rock with irregular banding. Patchy scheelite mineralisation present. Calcite veining is common.

3.9 - 4.1 m Fault, with clay pug and rock fragments, also very fine, powdery scheelite.

6.1 - 12.0 MARBLE

A light grey, faintly banded rock with abundant small calcite veins. No scheelite mineralisation but some pyrite is present. There is a little biotite.

Possible faults occur at:

7.7 m Broken core with clay.
10.9 m Sheared material with powdery scheelite.
11.8 m Recemented material (fault breccia?) with powdery scheelite.

12.0 - 15.1 PYROXENE HORNFELS/BIOTITE HORNFELS

Pyroxene-rich green/brown rock, with abundant calcite veining. There is a fairly high degree of disseminated scheelite mineralisation. Pyroxene predominates over biotite in this rock.

15.1 - 20.0 BIOTITE HORNFELS/PYROXENE HORNFELS

In this rock, biotite is more common than pyroxene. The pyroxene occurs in pods and thin layers in the otherwise massive biotite hornfels. Very little scheelite mineralisation.

Shear zones occur at:

15.4 - 15.5 m Sheared material, with powdery scheelite.
16.2 - 16.3
17.0 - 17.05
18.0 - 18.05
19.3 - 19.5 A major fault - clay filled with powdery scheelite. It has very sharp boundaries at an angle of 20° LAOC.

20.0 - 26.2 PYROXENE HORNFELS

A green-coloured rock consisting mainly of pyroxene with a little biotite. Mineralisation is present in the form of coarse patchy scheelite, most abundant between 20.4 and 21.65 m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/9

Faults in the form of broken core occur at 24.3 m, 25.8 m and 26.2 m.

26.2 - ~~24.0~~ 32.0 PYROXENE HORNFELS

Brown-green in colour with abundant calcite veining. There are patches of biotite hornfels present. Mineralisation is rare, a few coarse grains of scheelite and a little pyrite. There are many areas of broken and sheared core. General regions of broken core occur at 30.1 - 36.9 m and 39.1 - 42.0 m.

Major faults occur at:

27.1 - 27.2 m	A rehealed fault breccia with quartz and calcite veining.
31.6 m	
40.9 m	
27.3 - 39.6 m	Zones of pyroxene and leached garnet, which indicate that a major fault is nearby (especially 29.3 - 29.7 m)

EOH 42.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/8

PLANNING

PROPOSER: S. G. Brown DEPTH: 70 m

LOCATION: S13 Drill Cuddy

PURPOSE OF HOLE: Test B Lens

PROPOSED CO-ORDS: 220 360 E 564 057 N

INCLINATION: -55°

BEARING: 180° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 173° 39' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 360.40E 564 057.52 N

R.L. OF COLLAR: -201.75

INCLINATION OF HOLE: -52° 16'

PICKED UP BY: J. Cook DATE: 25/6/80

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS: 1.0 - 8.0 m, 7 m @ 1.27% WO_3
13.0 - 59.0 m, 46 m @ 0.74% WO_3

DRILLING

DATE COMMENCED: Oct 79 DATE TERMINATED: Oct 79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 64.7 m

REASON FOR TERMINATION: In Fault Zone

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not surveyed but on computer

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/8

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.0 m	3.0	2.5	83
3.0 - 4.8	1.8	1.8	100
4.8 - 6.5	1.7	1.7	100
6.5 - 8.4	1.9	1.9	100
8.4 - 11.4	3.0	3.0	100
11.4 - 12.8	1.4	1.2	86
12.8 - 16.2	34.	3.4	100
16.2 - 16.6	0.4	0.4	100
16.6 - 19.6	3.0	3.0	100
19.6 - 22.6	3.0	3.0	100
22.6 - 25.6	3.0	3.0	100
25.6 - 28.6	3.0	3.0	100
28.6 - 31.6	3.0	3.0	100
31.6 - 34.6	3.0	3.0	100
34.6 - 37.6	3.0	3.0	100
37.6 - 40.5	2.9	2.9	100
40.5 - 43.5	3.0	3.0	100
43.5 - 45.9	2.4	2.4	100
45.9 - 48.3	2.4	2.4	100
48.3 - 51.3	3.0	3.0	100
51.3 - 42.0	0.7	0.7	100
52.0 - 55.0	3.0	3.0	100
55.0 - 57.0	2.0	2.0	100
57.0 - 58.8	1.8	1.8	100
58.8 - 60.0	1.2	0.9	75
60.0 - 61.1	1.1	1.0	91
61.1 - 62.0	0.9	0.8	89
62.0 - 62.5	0.5	0.3	60
62.5 - 63.2	0.7	0.5	71
63.2 - 64.0	0.8	0.7	88
64.0 - 64.0	0.7	0.5	71
EOH 64.7 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/8

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)
0.0 - 7.6 m	gh	3-5		cc/chlor			66	
7.6 - 12.9	ch	5-10		cc/clay			77	
12.9 - 58.7	gh	4-8		cc/chlor			87	
58.7 - 67.4	bph	15->20		clay/chlor			11	

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 360/18

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12398	0	1	1.0	1.0	0.27	<.01		
99	1	2	"	"	1.52	<.01		
400	2	3	"	"	2.4	<.01		
01	3	4	"	"	1.06	<.01		
02	4	5	"	"	0.61	<.01		
03	5	6	"	"	1.15	<.01		
04	6	7	"	"	1.75	<.01		
05	7	8	"	"	0.40	<.01		
06	8	9	"	"	0.04	<.01		
07	9	10	"	"	0.03	<.01		
08	10	11	"	"	0.03	<.01		
09	11	12	"	"	0.13	<.01		
10	12	13	"	"	0.13	<.01		
11	13	14	"	"	0.82	<.01		
12	14	15	"	"	0.80	<.01		
13	15	16	"	"	0.81	<.01		
14	16	17	"	"	0.63	<.01		
15	17	18	"	"	0.63	<.01		
16	18	19	"	"	0.43	<.01		
17	19	20	"	"	0.69	<.01		
18	20	21	"	"	0.28	<.01		
19	21	22	"	"	0.62	<.01		
20	22	23	"	"	0.53	<.01		
21	23	24	"	"	0.50	<.01		
56	24	25	"	"	0.83	<.01		
22	24	26	"	"	1.98	<.01		
23	26	27	"	"	0.81	<.01		
24	27	28	"	"	0.70	<.01		
25	28	29	"	"	1.19	<.01		
26	29	30	"	"	1.97	<.01		
27	30	31	"	"	0.81	<.01		
28	31	32	"	"	0.83	<.01		
29	32	33	"	"	0.65	<.01		
30	33	34	"	"	0.83	<.01		
31	34	35	"	"	0.44	<.01		
32	35	36	"	"	0.82	<.01		
33	36	37	"	"	0.81	<.01		
34	37	38	"	"	0.70	<.01		
35	38	39	"	"	0.40	<.01		
36	39	40	"	"	0.82	<.01		
37	40	41	"	"	0.17	<.01		
38	41	42	"	"	0.82	<.01		
39	42	43	"	"	0.97	<.01		
40	43	44	"	"	0.74	<.01		
41	44	45	"	"	0.97	<.01		
42	45	46	"	"	0.44	<.01		
43	46	47	"	"	0.95	<.01		
44	47	48	"	"	1.51	<.01		
45	48	49	"	"	0.85	<.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 360/8

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12446	49	50	1.0	1.0	0.90	<.01		
47	50	51	"	"	0.70	<.01		
48	51	52	"	"	0.21	<.01		
49	52	53	"	"	0.97	<.01		
50	53	54	"	"	0.96	<.01		
51	54	55	"	"	0.61	<.01		
52	55	56	"	"	0.15	<.01		
53	56	57	"	"	0.57	<.01		
54	57	58	"	"	0.13	<.01		
55	58	59	"	"	0.26	<.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/8

All the core is in B Lens

0.0 - 7.6 m GARNET SKARN

Well mineralised andradite garnet skarn, although disturbed the unit is generally competant.

7.6 - 12.9 MARBLE

Unreplaced, grey, commonly fractured marble. Brecciation with incomplete rehealing and calcite infilling has occured @ 11.6 - 12.9 m leaving some vughs and cavities.

12.9 - 58.7 GARNET SKARN

Well mineralised homogeneous garnet skarn. This rock is very competant although cut by many calcite veins. Some unreplaced marble occurs from 54.7 - 56.3 m.

58.7 - 67.4 DISTRUBED BIOTITE PYROXENE HORNFELS

This unit grades conformably into the previous unit. The lithology is biotite hornfels and pyroxene hornfels with biotite hornfels dominant.

Extensive shearing is present throughout and about half the core is present as small (1 cm) fragments with slickenslides on their surfaces. Many small calcite veins cut the rock together with numerous chlorite filled shears.

A recemented breccia with 0.2 - 2.0 cm size fragments occurs from 64.3 m to the end of the hole.

EOH 67.4 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/7

PLANNING

PROPOSER: S. G. Brown DEPTH: 15 m

LOCATION: S13

PURPOSE OF HOLE: To test 'B' Lens

PROPOSED CO-ORDS: 220360.0E 564055.0 N

INCLINATION: +90°

BEARING: - °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown DATE: 1/9/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220359.9 E 564058.5 N

R.L. OF COLLAR: B-197.9

INCLINATION OF HOLE:

PICKED UP BY: R. Howman DATE: 21/9/79

SUMMARY

LOGGED BY: R. H. Davies

RESULTS: 0- 2 m, 2 m @ 0.59% WO_3 0.04% Mo B-lens
6-11 m, 5 m @ 0.62% WO_3 0.04% Mo B-lens

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 18,50

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 18.50

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not Surveyed

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/7

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0	2.0	1.9	95
2.0 - 3.0	1.0	0.9	90
3.0 - 5.8	2.8	2.8	100
5.8 - 7.5	1.7	1.5	88
7.5 - 9.1	1.6	1.36	85
9.1 - 10.0	0.9	0.97	108
10.0 - 11.6	1.6	1.6	100
11.6 - 12.8	1.2	1.26	105
12.8 - 14.0	1.2	0.9	75
14.0 - 16.2	2.2	2.0	91
16.2 - 16.7	0.5	0.47	94
16.7 - 17.5	0.8	0.66	83
17.5 - 18.5	1.0	1.06	106

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/7

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 - 2.0	gh (b)	9.5	67° at 0.5 28° 0.6	Clay/calcite			38	Joint at 1.1 m may have water flow
2.0 - 7.2	ch	13.1	56° 3.2 64° 3.3 12° 6.4	Clay/calcite	34° at 3.3m 34° 5.9			Brecciation zones at 3.97 - 4.24 and 4.50 - 5.20 m.
7.2 - 12.4	gh (?)	24.8	90° 7.3 19° 9.4	Chl/calcite/clay				Pug zones at 9.40 - 9.45 9.60 - 9.90
12.4 - 17.9	ph	18.2	Sub // 12.8 28° 19.9 Sub // 14.6 79° 14.7	Chl	50° at 14.6 43° 15.4 50° 17.3			
17.9 - 18.3	bh	23.3	35° 18.1 80° 18.2	Chl/pyrite	55° at 18.0			

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 360/7

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 11574	0	1	1.0	1.0	0.51	0.03		
75	1	2	"	"	0.66	0.05		
76	2	3	"	"	<0.01	0.01		
77	3	4	"	"	<0.01	<0.01		
78	4	5	"	"	<0.01	0.01		
79	5	6	"	"	<0.01	<0.01		
80	6	7	"	"	0.32	0.02		
81	7	8	"	"	1.23	0.08		
82	8	9	"	"	1.22	0.09		
83	9	10	"	"	<0.01	0.01		
84	10	11	"	"	0.34	0.01		
85	11	12	"	"	<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 360/7

0.0 - 2.00 m GARNET HORNFELS

This zone consists of a medium grained garnet hornfels with abundant scheelite mineralisation. Grossular rich zones are present and gives these zones a grey/green colour. Generally the brown/green of the andradite garnet hornfels is dominant.

Joints	67^{o}	LCA at	0.5 m
	28^{o}		0.6 m

No bedding was observed. A joint at 1.1 m had $CaCo_3$ and clay on its surface and may have had water flow along it.

2.0 - 7.2 MARBLE

The marble unit contains dark and light gray bands and also contains some mineralisation near its base.

2.0 - 2.8 m This zone contains a light gray/green pyroxene hornfels. The unit is soft and friable and contains calcite filled joints.

At 2.0 m a small pug zone (3.0 cm) may represent a fault. This unit is generally barren.

2.0 - 7.2 m This unit consists of a gray banded marble which has abundant calcite veinations. The unit contains two brecciated areas. Both of the brecciation zones have been refilled by calcite.

Some mineralisation occurs near the base of the unit. Brecciation zone 3.97 - 4.24 m
4.50 - 5.20 m

Major Joints	56^{o}	LCA	3.2 m
	64^{o}		3.3 m
	12^{o}		6.4 m

Bedding	34^{o}	LCA	3.3 m
	34^{o}		5.9 m

7.2 - 12.4 GARNET PYROXENE HORNFELS

This zone contains abundant scheelite mineralisation. The unit is dark olive green in colour and has numerous chlorite filled joints. Pug zones occurs at 9.40 - 9.45 m and 9.60 - 9.90 m

Joints	90^{o}	LCA	7.30 m
	19^{o}		9.40 m

12.40 - 17.90 PYROXENE HORNFELS

This unit consists of a light gray/green pyroxene hornfels which contains little scheelite mineralisation. The unit is banded and has chlorite filled joints

At 14.00 m and 16.20 m the core is extensively fractured and may be indicative of some faulting.

Major Joints

Sub parallel		LCA	12.80 m
	28°		19.90 m
Sub parallel			14.60 m
	79°		14.70 m

Bedding	50°	LCA	14.60 m
	43°		15.40 m
	50°		17.30 m

17.90 - 18.30 BIOTITE HORNFELS

This zone contains a dark grey biotite hornfels. The biotite hornfels is banded and contains characteristic pyrite along joint planes.

Major Joints.	35°	LCA	18.10 m
	80°		18.20 m

Bedding	55°	LCA	18.00 m

EOH 18.30 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/6

PLANNING

PROPOSER: S. G. Brown — DEPTH: 65 m

LOCATION: S13

PURPOSE OF HOLE: To test 'B' Lens

PROPOSED CO-ORDS: 220360 E 564060 N

INCLINATION: -45°

BEARING: 360° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown — DATE: 20/8/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 3° 09' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220360.0 E 564059.4 N

R.L. OF COLLAR: -201.75

INCLINATION OF HOLE: -44° 19'

PICKED UP BY: W. Davies — DATE: 6/9/79

SUMMARY

LOGGED BY: S. G. Brown RESD

RESULTS:
0.0 - 1.0 m, 1 m @ 0.49% WO_3
15.0 - 21.0 m, 6 m @ 0.44% WO_3
24.0 - 30.0 m, 6 m @ 0.73% WO_3

DRILLING

DATE COMMENCED: DATE TERMINATED: 5/9/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: 56TT
DEPTH: 36 m

CORE: SIZE: 46TT
DEPTH: 61.30 m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 61.30 m

REASON FOR TERMINATION: 30 m of volcanics possibly though Grassy River Fault

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot to 61.30 m

WATER:

COMMENTS ON DRILLING CONDITIONS: Poor

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/6

Surveyed method: Multishot
Final depth: 61.30 m
Casing depth: 36.00 m

Depth surveyed to: 61.30 m
Date surveyed: 5-9-79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
7	360°	350°	45°	-45°	4.95	4.87	.86
16	360°	350°	45°	-45°	11.31	11.13	1.96
52	1°	351°	44° 15'	-45° 45'	37.10	35.94	5.89
61.3	3°	353°	44°	-46°	43.79	42.35	6.68

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.2 m	3.2	2.6	81
3.2 - 6.0	2.8	2.7	96
6.0 - 7.7	1.7	1.7	100
7.7 - 10.2	2.5	2.5	100
10.2 - 13.0	2.8	2.8	100
13.0 - 15.2	2.2	2.1	95
15.2 - 18.2	3.0	3.0	100
18.2 - 21.2	3.0	3.0	100
21.2 - 21.5	0.3	0.3	100
21.5 - 24.2	2.7	2.7	100
24.2 - 27.2	3.0	3.0	100
27.2 - 29.8	2.6	2.6	100
29.8 - 31.4	1.6	1.6	100
31.4 - 33.5	2.1	1.5	71
33.5 - 34.6	1.1	0.7	64
34.6 - 35.1	0.5	0.4	80
35.1 - 35.7	0.6	0.3	50
35.7 - 36.7	1.0	0.3	30
36.7 - 37.0	0.3	0.15	50
37.0 - 37.2	0.2	0.1	50
37.2 - 37.5	0.3	0.15	50
37.5 - 38.0	0.5	0.2	40
38.0 - 38.5	0.5	0.2	40
38.5 - 39.8	1.3	0.8	62
39.8 - 40.6	0.8	0.7	88
40.6 - 41.4	0.8	0.6	75
41.4 - 42.0	0.6	0.4	66
42.0 - 43.4	1.4	1.2	86
43.4 - 44.2	0.8	0.6	75
44.2 - 44.7	0.5	0.2	40
44.7 - 45.5	0.8	0.6	75
45.5 - 46.7	1.2	1.0	83
46.7 - 48.4	1.7	1.5	88
48.4 - 49.2	0.8	0.4	50
49.2 - 50.0	0.8	0.3	38
50.0 - 50.7	0.7	0.4	57
50.7 - 51.5	0.8	0.5	63
51.5 - 52.4	0.9	0.8	89
52.4 - 53.0	0.6	0.4	66
53.0 - 53.6	0.6	0.4	66
53.6 - 54.3	0.7	0.3	43
54.3 - 54.6	0.3	0.1	30
54.6 - 55.2	0.6	0.5	83
55.2 - 57.2	2.0	2.0	100
57.2 - 27.9	0.7	0.5	71
57.9 - 58.4	0.5	0.3	60
58.4 - 59.1	0.7	0.4	57
59.1 - 59.6	0.5	0.3	60
59.6 - 60.2	0.6	0.5	83
60.2 - 60.7	0.5	0.3	60
60.7 - 61.2	0.5	0.3	60
61.2 - 61.3	0.1	0.05	50
EOH 61.3 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/6

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 - 13.9 m	ch	6-15		cc/pugh			25	
13.9 - 33.0	gh	1-10		cc/chlor			76	
33.0 - 61.3	Fault bh/ph	8-> 20		cc/gravel/rock floor/chlor/clay			8	

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 360/6

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 12289	0	1	1.0	1.0	0.49	0.01		
90	1	2	"	"	0.08	<0.01		
91	2	3	"	"	<0.01	<0.01		
92	9	10	"	"	<0.01	<0.01		
93	10	11	"	"	0.17	<0.01		
94	11	12	"	"	<0.01	<0.01		
95	12	13	"	"	<0.01	<0.01		
96	13	14	"	"	0.01	0.01		
97	14	15	"	"	0.26	<0.01		
98	15	16	"	"	0.54	0.01		
99	16	17	"	"	0.62	0.01		
12300	17	18	"	"	0.11	<0.01		
01	18	19	"	"	0.33	0.04		
02	19	20	"	"	0.58	0.02		
03	20	21	"	"	0.43	0.01		
04	21	22	"	"	0.27	<0.01		
05	22	23	"	"	0.09	<0.01		
06	23	24	"	"	0.17	0.01		
07	24	25	"	"	0.31	0.01		
08	25	26	"	"	0.26	0.01		
09	26	27	"	"	0.66	0.01		
10	27	28	"	"	0.40	0.01		
11	28	29	"	"	0.38	0.01		
12	29	30	"	"	2.35	0.03		
13	30	31	"	"	0.13	0.01		
14	31	32	"	"	<0.01	<0.01		
15	32	33	"	"	<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 360/6

0.0 - 13.9 m MARBLE

Initially a pale brown colour to around 8 m, it later becomes mostly a fresh grey colour, with brown alteration near joints.

Some weak mineralisation is present from 0.0 - 1.5 m

The first 8 m of core contains a number of fractures, only some of which are rehealed. At 6.7 m these is about 5 cm of core containing open carbonate lined cavities.

Bedding is @ 43^{o} to LCA @ 2.2 m
34^{o} 3.3 m

13.9 - 33.0 GARNET SKARN

Andradite garnet and scheelite replacement of marble not everywhere complete, e.g. barren marble from 22.8 - 24.2 m and from 25.5 - 28.8 m.

The mineralisation probably averages medium grade. Remnant bedding @ 17.5 m is @ 44^{o} to LCA.

The barren marble is mostly the brown, slightly altered type.

Bedding in this is 48^{o} to LCA @ 23 m

33.0 - 61.3 FAULT ZONE

This large zone is charcterised by broken core, clay and gravel and poor core recoveries.

The rock type is biotite hornfels/pyroxene hornfels shot through with calcite veins and pods. About 1/3 of the recovered core is gravel/mud or slickenslides fragments 1-3 cm in diameter.

It is not mineralised. The zone from 33 - 37.5 m is particularly bad and most of the core is clay and rock flour.

Reasonably good core was recovered from 37.5 m to about 50 m. Round about 50 m the quality again deteriorates and the core is dominantly slickenslides fragments for about 5 m. From 55 - 57 m. Firstly good, competant core is present. Beyond that to the end of the hole, the core is a mixture of clay and slickenslides fragments.

EOH 61.3 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 360/5

PLANNING

PROPOSER: S. G. Brown DEPTH: 55 m

LOCATION: S13

PURPOSE OF HOLE: To test "B" Lens and Northern Boundary Fault.

PROPOSED CO-ORDS: 220360.0 E 564060 N

INCLINATION: 0^{o}

BEARING: 360^{o} ^{o}GRID ^{o}MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown DATE: 20/8/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0^{o} 47' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220360.0 E 564061.1 N

R.L. OF COLLAR: -200.46

INCLINATION OF HOLE: $+1^{o}$ 54'

PICKED UP BY: W. Davies DATE: 6/9/79

SUMMARY

LOGGED BY: S. G. Brown

RESULTS:

0 - 17 m	17 m @	0.65%	0.04%
24 - 25 m	1 m @	0.55%	0.03%
27 - 36 m	9 m @	1.56%	0.06%
40 - 41 m	1 m @	0.48%	0.03%
43 - 48 m	5 m @	0.46%	0.03%

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 50 m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 50 m

REASON FOR TERMINATION: Intersected Northern Boundary Fault

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot to 40 m

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

PJH 4/3/80

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/5

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

Depth surveyed to: 40.00 m
Date surveyed: 5/9/80
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
3	1°	351°	+89°	+1°	+.05	2.96	0.47
10	1°	351°	+89°	+1°	+.17	9.87	1.56
28	3°	353°	-90°	+0°	+.17	27.74	3.75
40	4°	354°	-89° 30'	-0° 30'	+.07	39.67	5.00
50	5°	355°	-89°	-1°	-.11	49.63	5.87

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 360/5

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	Gph	2		Chl/clay/carb	20°@ 13.1		96	
17.4 - 26.36	Ch	2		Carb/clay/chl/sulph	35°@ 23.4		93	
26/36 - 34.60	Gph	2		Carb/clay/chl/sulph	-		92	
34.60 - 26.50	Gph	3		Calc/carb/clay/sulph	-		29	
36.50 - 39.30	BRECCIA			Recemented with chlorite and calcite.				
39.30 - 47.55	Gph	14		Calc/chl/clay/minor sulph	-		63	
47.55 - 50.00	FAULT ZONE			Northern Boundary Fault				
EOH 50.00 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 360/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 11528	0	1	1.0	1.0	1.13	0.22		
29	1	2	"	"	0.71	0.06		
30	2	3	" "	"	0.77	0.04		
31	3	4	"	"	0.90	0.07		
32	3	4	"	"	0.69	0.03		
33	5	6	"	"	0.77	0.03		
34	6	7	"	"	0.38	0.02		
35	7	8	"	"	0.27	0.02		
36	8	9	"	"	0.48	0.03		
37	9	10	"	"	0.67	0.03		
38	10	11	"	"	0.71	0.03		
39	11	12	"	"	0.57	0.01		
40	12	13	"	"	0.72	0.02		
41	13	14	"	"	0.47	0.02		
42	14	15	"	"	0.76	0.02		
43	15	16	"	"	0.63	0.02		
44	16	17	"	"	0.45	0.01		
45	17	18	"	"	0.04	0.01		
46	18	19	"	"	<0.01	<0.01		
47	22	23	"	"	<0.01	<0.01		
48	23	24	"	"	0.24	0.01		
49	24	25	"	"	0.55	0.03		
50	25	26	"	"	<0.01	0.01		
51	26	27	"	"	0.18	0.01		
52	27	28	"	"	0.87	0.03		
53	28	29	"	"	0.40	0.03		
54	29	30	"	"	0.68	0.06		
55	30	31	"	"	0.51	0.01		
56	31	32	"	"	1.57	0.05		
57	32	33	"	"	0.95	0.03		
58	33	34	"	"	3.10	0.08		
59	34	35	"	"	10.1	0.21		
60	35	36	"	"	1.47	0.06		
61	36	37	"	"	<0.01	0.02		
62	37	38	"	"	<0.01	0.02		
63	38	39	"	"	<0.01	0.02		
64	39	40	"	"	0.09	0.02		
65	40	41	"	"	0.48	0.03		
66	41	42	"	"	0.23	0.02		
67	42	43	"	"	<0.01	0.01		
68	43	44	"	"	0.58	0.02		
69	44	45	"	"	0.66	0.03		
70	45	46	"	"	0.46	0.02		
71	46	47	"	"	0.29	0.02		
72	47	48	"	"	0.32	0.04		
73	48	49	"	"	0.17	0.03		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 360/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.90	3.90	3.86	99
3.90 - 6.50	2.60	2.48	95
6.50 - 9.50	3.00	3.00	100
9.50 - 12.50	3.0	2.98	98
12.50 - 15.50	3.0	2.02	101
15.50 - 18.50	3.0	2.99	100
18.50 - 21.50	3.0	2.99	100
21.50 - 24.50	3.0	3.0	100
24.50 - 27.50	3.0	2.98	99
27.50 - 30.50	3.0	2.98	99
30.50 - 33.50	3.0	2.92	97
33.50 - 35.60	2.10	2.00	95
35.60 - 38.30	2.70	2.63	97
38.30 - 40.80	2.50	2.51	100
40.80 - 43.80	3.0	3.0	100
43.80 - 46.80	3.0	2.97	99
46.80 - 49.40	2.60	2.10	81
49.40 - 50.00	0.60	0.52	87
EOH 50.00 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/5

0.0 - 17.40 m GARNET PYROXENE HORNFELS

This unit consists of a garnet rich matrix with varying amounts of pyroxene present. Some areas are about 50/50 but overall the garnet predominates. Calcite is present throughout as blebs veinlets and joint or fracture fillings. This unit represents about complete replacement of the B Lens marble.

Possible remanant bedding is present at 25° LCA at 13.1 m. Fine grained scheelite mineralisation is present through out this unit. Some molybdenite is apparent in the pyroxene rich zones.

Major joints are located at 4.1 m @ sub parallel to LCA
11.7 m @ 38° LCA
13.7 m @ 41° LCA

17.40 - 26.44 MARBLE

A dark grey fine grained recrystallized marble with only vague traces of the original bedding present in same areas. Between 23.67 and 24.73 m. There is partial replacement to a pyroxene garnet skarn. This area contains finely disseminated scheelite. The whole unit is cut by a series of recemented fractures some of which are possibly still acting as water channels.

Bedding 35° LCA at 23,4 m

Main fractures are located at

23.5 m @ 20° LCA
23.3 m @ 20° LCA

26.44 - 36.50 GARNET PYROXENE HORNFELS

This is similar to that between 0,00 and 17,4 m except that there is a much larger percentage of pyroxene rich zones. The pyroxene rich areas make up about 40% of the total.

Scheelite mineralisation is present thoughout as finely disseminated crystals.

The last 2 m of this core are fairly heavily broken.

Major fractures are present at 29.02 m 20° LCA calcite filling
29.82 m 60° LCA calcite filling
31.50 m 22° LCA calcite and clay filled
34.92 - 35.00 m 26° LCA calcite and clay filled.

36,50 - 39.30 BRECCIATED BIOTITE PYROXENE HORNFLES

This is a crushed zone of biotite pyroxene hornfels. The average fragment size is about 1 cm and the core is held together by the chlorite and carbonate cement. Some sulphides are also present in this area. From about 38.5 m on the core is richer in pyroxene and garnet and is more properly termed a pyroxene hornfels. This is almost completely in mineralized.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 360/5

39.30 - 47.55 m GARNET PYROXENE HORNFELS

As between 0.00 and 17.4 m but with rather more unreplaced marble present in this area. Scheelite mineralisation is present though out this unit.

The initial 1.2 m is fairly badly broken and large numbers of fine veinlets are present.

Major fractures (possible faults) are present at

42.5 m 64° LCA approximately calcite filled
45.1 m 45.4 57° LCA calcite filled
47.28 m 70° LCA approximately chlorite filled

47.55 - 50.00 FAULT ZONE

Consists of broken chloritic material, extremely broken, goes to pug after sitting for a time.

EOH 50.00 m

F1

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. D 360/4

PLANNING

PROPOSER: J. M. Clark DEPTH:

LOCATION: S13 Diamond Drill Cuddy

PURPOSE OF HOLE: Skew drilling to test width and dip of fault intersected in D 360/3

CO-ORDS: 220360 E 564050 N

INCLINATION: 0° (horiz)

BEARING: 90 °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 90°31' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220363.7 E 564050 N

R.L. OF COLLAR: -200.0

INCLINATION OF HOLE: 0° 59'

PICKED UP BY: B. Davies DATE: 20-9-1978

SUMMARY

LOGGED BY: G. Bujtor

RESULTS: Grassy River Fault 17.0 - 25.7m

DRILLING

DATE COMMENCED: 22-8-78 DATE TERMINATED: 6-10-78

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE: 56TT
DEPTH: 25.7m

WEDGE PLACED: DEPTH:

EXTENSION:

FINAL DEPTH: 25.7m

REASON FOR TERMINATION: Abandoned due to bad ground conditions

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not done as drill rod was left behind in hole.

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 360/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.5	1.5	1.5	100
1.5 - 3.0	1.5	1.5	100
3.0 - 4.5	1.5	1.5	100
4.5 - 6.0	1.5	1.5	100
6.0 - 7.5	1.5	1.5	100
7.5 - 9.5	2.0	1.8	90
9.5 - 10.1	0.6	1.5	250
10.1 - 11.0	0.9	0.8	89
11.0 - 12.4	1.4	1.4	100
12.4 - 13.6	1.2	1.2	100
13.6 - 14.5	0.9	0.65	72
14.5 - 15.2	0.7	0.7	100
15.2 - 15.5	0.3	0.4	133
15.5 - 16.4	0.9	0.65	72
16.4 - 16.6	0.2	0.2	100
16.6 - 22.0	5.4	1.0	19 Fault
22.0 - 25.0	3.0	2.0	67 Fault
25.70 - ?25.70	0.7	?0.7	100 Fault

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 360/4

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8523	0	1	1.0	1.0	<0.01	<0.01		
24	1	2	"	"	<0.01	<0.01		
25	2	3	"	"	<0.01	<0.01		
26	3	4	"	"	1.81	0.06		
27	4	5	"	"	0.02	0.01		
28	5	6	"	"	0.02	0.01		
29	6	7	"	"	0.49	0.01		
30	7	8	"	"	0.09	<0.01		
31	8	9	"	"	0.05	<0.01		
32	9	10	"	"	0.02	0.01		
33	10	11	"	"	<0.01	<0.01		
34	11	12	"	"	<0.01	<0.01		
35	12	13	"	"	0.02	0.01		
36	13	14	"	"	0.04	0.01		
37	14	15	"	"	0.02	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 360/4

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 - 9.6	B lens	10		Chl,Clay,Carb		100	34	
9.6 - 17.0	Bh	10- 20		Chl,Clay,Carb,Sul	47°:13.4 m	100	34	
17.0 - 25.7?	GRASSY RIVER FAULT - Chloritic, clay, breccia, pug.							
EOH 25.7 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. 0-15 m 56TT
   15-25.7 m 46TT

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/4

0.0 - ?9.0 m — B LENS

0.0 - 3.00 m — MARBLE

Light brownish grey barren marble with many clay alteration zones - weathering/alteration features. The marble effarvesces readily under acid attack. The core is broken and fractured.

3.00 - 3.70 m — SKARN

Andradite skarn with abundant pyroxene and fine disseminated scheelite. Free Mo crystals around 3.7 m.

3.70 - 9.60 m — PYROXENE HORNFELS

Broken and fractured greenish pyroxene hornfels which could possibly represent altered biotite hornfels and not form part of B lens proper.

The core is very much sheared with abundant chlorite on joints and fractures rare scheelite is present.

9.60 - ?17.00 m — PYROXENE HORNFELS - BIOTITE HORNFELS

Fine to medium grained biotite hornfels with abundant pyroxene hornfels alteration. The core is fractured and broken with many shears.

Possibly shearing is at 47^{o} to LCA at 13.4 m. Minor coarse blue fluorescing scheelite occurs around 12.5 - 12.6 m.

?17.00 - ?25.70 m — ?GRASSY RIVER FAULT

Extremely brecciated, fractured clayey pug zone with some coarse grained aplite dykes (0.65 m dyke somewhere between 22-25 m, and possibly 0.65 m from 25.05 - 25.70 m).

Hole abandoned at 25.70 m.

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. D 360/3

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S13 Diamond drill drive

PURPOSE OF HOLE: Skew drilling to test for B lens & (C lens?) East of Decline Fault zone.

CO-ORDS: 220360 E 564050 N

INCLINATION: -70°

BEARING: 90° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 94°01' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220361.7 E 564050.3 N

R.L. OF COLLAR: -201.0

INCLINATION OF HOLE: -69° 24'

PICKED UP BY: B. Davies DATE: 20-9-1978

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: B lens 9-19 m, 10 m @ 0.67% WO_3

DRILLING

DATE COMMENCED: 8-8-1978 DATE TERMINATED:

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE: NQ
DEPTH: 31m

CORE: SIZE: 56TT
DEPTH: 53.1m

WEDGE PLACED: DEPTH:

EXTENSION:

FINAL DEPTH: 53.1 m

REASON FOR TERMINATION: Abandoned in Grassy River Fault.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed to 53 m

WATER: Minor water flow

COMMENTS ON DRILLING CONDITIONS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/3

Survey method: Singleshot Camera
Final depth: 53.1 m
Casing depth: 31.0 m

Depth surveyed to: 53.0 m
Date surveyed 23-8-78
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
0	94			-67.4	0	0	0
35	95	85	21.25	-68.75	32.62	1.11	12.63
54	91	81	20.75	-69.25	50.38	2.16	19.28

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 360/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.7	2.7	2.7	100 broken
2.7 - 4.8	2.1	2.1	100
4.8 - 6.8	2.0	2.0	100
6.8 - 8.8	2.0	2.0	100
8.8 - 10.8	2.0	2.0	100
10.9 - 12.8	2.0	2.0	100
12.8 - 14.8	2.0	2.0	100
14.8 - 16.8	2.0	2.0	100
16.8 - 18.8	2.0	2.0	100
18.8 - 20.8	2.0	2.0	100
20.8 - 22.8	2.0	2.0	100
22.8 - 24.8	2.0	2.0	100
24.8 - 26.8	2.0	2.0	100
26.8 - 27.8	1.0	1.0	100
27.8 - 29.2	1.4	1.4	100
29.2 - 30.5	1.3	(?)1.3 m	?100 broken
30.5 - 31.6	1.1	<1.0	91 broken
31.6 - 33.1	1.5	0.5	33 broken
33.1 - 33.8	0.7	0.2	29 broken
33.8 - 34.7	0.9	0.6	67
34.7 - 35.8	1.1	0.6	55
35.8 - 36.8	1.0	0.7	70
36.8 - 37.7	0.9	0.6	67
37.7 - 39.0	1.3	0.4	31
39.0 - 40.5	1.5	0.8	53
40.5 - 41.4	0.9	0.6	67
41.4 - 42.1	0.7	0.4	57
42.1 - 43.0	0.9	0.3	33
43.0 - 44.2	1.2	0.3	25
44.2 - 44.5	0.3	0.15	50
44.5 - 45.0	0.5	0.4	80
45.0 - 45.5	0.5	0.5	100
45.5 - 46.6	1.1	1.0	91
46.6 - 47.5	0.9	0.9	100
47.5 - 48.0	0.5	0.4	80
48.0 - 48.9	0.9	0.9	100
48.9 - 49.5	0.6	0.6	100
49.5 - 50.0	0.5	0.5	100
50.0 - 50.7	0.7	0.5	71
50.7 - 51.3	0.6	0.4	67
51.3 - 52.5	1.2	1.0	83
52.5 - 53.10	0.6	0.5	83
EOH 53.10 m			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 360/3

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT L.A.O.C)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 6.2	Ch	6-8		Chl,carb,clay		100	69	
6.2 - 19.65	Gh	5		Chl,clay		100	93	
19.65 - 29.2	Ch	6-12		Clay,carb		100	73	
29.2 - 53.1	GRASSY RIVER FAULT							
EOH 53.1 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. 56TT

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 360/3

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 8158	4	5	1.0	1.0	0.02	<0.01		
59	5	6	"	"	<0.01	<0.01		
60	6	7	"	"	0.25	<0.01		
61	7	8	"	"	0.19	<0.01		
62	8	9	"	"	0.20	0.03		
63	9	10	"	"	0.59	0.01		
64	10	11	"	"	0.98	0.03		
65	11	12	"	"	0.70	0.02		
66	12	13	"	"	0.40	0.01		
67	13	14	"	"	0.68	0.03		
68	14	15	"	"	0.68	0.04		
69	15	16	"	"	0.76	0.02		
70	16	17	"	"	0.58	0.02		
71	17	18	"	"	0.98	0.04		
72	18	19	"	"	0.35	0.01		
73	19	20	"	"	0.10	<0.01		
74	20	21	"	"	<0.01	<0.01		
75	21	22	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/3

0.00 - 29.20 m

B LENS

Typical B lens consisting of the following subdivision:-

0.00 - 6.20 m Marble - barren white to grey marbles. Bedding, if any, very disturbed. Many joints/fractures clay filled.

6.20 - 19.65 m Garnet Pyroxene skarn

Typical garnet pyroxene skarn with fair to good disseminated scheelite.

19.65 - 29.20 m Marble -"barren" white to grey coloured marbles with rare scheelite present. Numerous clay veins/altered joints - fractures are common.

Towards the base the core becomes very broken and fractured, particularly from 27.7 m onwards.

29.20 - 53.10 m

GRASSY RIVER FAULT(?) DECLINE FAULT

Badly broken, rubbly brecciated fault material with abundant calcite/carbonate/?quartz veining and fracturing.

The core in places resembles volcanics particularly with the presence of epidote.

The core is completely in competent.

EOH 53.10 m.

GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. D 360/2

PLANNING

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

Location: S13 Diamond Drill Cuddy

.....

Purpose of Hole: To test Decline Fault Zone and C lens

Co-ords: 220360 E 564050 N

Inclination: -63

Bearing: 270° °Grid °Mag

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

Depth: .....

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

SURVEY

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

Surveyed Bearing: 267° 50' °Grid °Mag

Surveyed in by: ..... Date .....

Actual Co-ords: 220357.8 E 564050.0 N

R.L. of Collar: R-201.6

Inclination of Hole: -61° 10'

Picked up By: W.D.S. Date 26-7-78

SUMMARY

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

Results: 29-55m, 26m at 1.60% WO_3

Upper C/Lower C and Min M/M

.....

.....

DRILLING

Date Commenced: 12-7-1978 Date Terminated 25-7-1978

Driller/Contractor A.D.D.

Casing:	Size :	NQ			
	Depth :	1m			
Core:	Size :	56TT	46TT		
	Depth :	33.0m	91.0m		

Wedge Runoff:

Wedge placed: Depth

Proposed by: Approved by

Reason

Extension: Nil

Final Depth: 91.0m

Reason for Termination: Successfully tested Decline Fault, C lens mineralization and granite.

Condition of hole on completion:

Casing;

Cemented:

Bore hole survey: Survey to 91.0

Water:

Comments on Drilling Conditions: Hole cased off below Decline Fault.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/2

Survey method: Single shot
Final depth: 91.0m
Casing depth: 33.0m

Depth surveyed to: 91.0 m
Date surveyed 24-7-1978
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		S	W
0	267.8			-61.2	0	0	0
37	270	260	28	-62.0	32.67	3.02	17.11
61	270	260	28.25	-61.75	53.81	4.99	28.30
91	267	257	28.75	-61.25	80.11	8.24	42.36
EOH 91.0m							

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 360/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.9	0.9	0.9	100 broken
0.9 - 2.8	1.9	1.5	79
2.8 - 5.7	2.9	2.9	100
5.7 - 8.7	3.0	3.0	100
8.7 - 11.6	2.9	2.9	100
11.6 - 14.6	3.0	3.0	100
14.6 - 16.6	2.0	2.0	100 broken
16.6 - 17.1	0.5	0.5	100 broken
17.1 - 19.2	2.1	2.1	100
19.2 - 20.4	1.2	1.2	100 broken
20.4 - 21.2	0.8	0.8	100 broken
21.2 - 22.2	1.0	1.0	100 broken
22.2 - 22.8	0.6	0.4	67 broken
22.8 - 23.6	0.8	0.7	88 broken
23.6 - 24.6	1.0	0.4	40 broken
24.6 - 25.2	0.6	0.4	67 broken
25.2 - 26.5	1.3	1.3	100 broken
26.5 - 29.3	2.8	2.8	100
29.3 - 32.4	3.1	2.9	94
32.4 - 33.5	1.1	1.10	100
33.5 - 35.2	1.7	1.7	100
35.2 - 38.1	2.9	2.9	100
38.1 - 40.6	2.5	2.5	100
40.6 - 43.6	3.0	3.0	100
43.6 - 46.6	3.0	3.0	100
46.6 - 49.6	3.0	3.0	100
49.6 - 52.6	3.0	3.0	100
52.6 - 55.6	3.0	3.0	100
55.6 - 58.2	2.6	2.6	100
58.2 - 61.0	2.8	2.8	100
61.0 - 64.0	3.0	3.0	100
64.0 - 67.0	3.0	3.0	100
67.0 - 70.0	3.0	3.0	100
70.0 - 72.6	2.6	2.6	100
72.6 - 75.6	3.0	3.0	100
75.6 - 78.1	2.5	2.5	100
78.1 - 81.0	2.9	2.9	100
81.0 - 82.5	1.5	1.5	100
82.5 - 85.1	2.6	2.6	100
85.1 - 88.10	3.0	3.0	100
88.1 - 91.0	2.9	2.9	100
EOH 91.0 m			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 360/2

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 7432	0	1	1.0	1.0	0.19	0.01		
33	1	2	"	"	0.04	0.01		
34	6	7	"	"	0.03	<0.01		
35	7	8	"	"	0.12	<0.01		
36	8	9	"	"	0.22	0.01		
37	9	10	"	"	0.07	<0.01		
38	10	11	"	"	<0.01	<0.01		
39	11	12	"	"	<0.01	<0.01		
40	12	13	"	"	<0.01	<0.01		
41	13	14	"	"	0.21	0.02		
42	14	15	"	"	0.12	0.01		
60	29	30	"	"	0.80	0.01		
61	30	31	"	"	0.77	0.01		
62	31	32	"	"	0.27	0.02		
63	32	33	"	"	1.39	<0.01		
64	33	34	"	"	1.54	0.01		
65	34	35	"	"	1.54	0.01		
66	35	36	"	"	1.93	0.01		
67	36	37	"	"	0.98	<0.01		
68	37	38	"	"	0.13	0.02		
69	38	39	"	"	1.48	<0.01		
70	39	40	"	"	1.14	<0.01	26m @ 2.48% WO_3	
71	40	41	"	"	9.3	0.04	or (1.60% WO_3 with 7+ cut)	
72	41	42	"	"	11.9	0.06		
72	42	43	"	"	5.00	0.03		
74	43	44	"	"	1.68	0.01		
75	44	45	"	"	1.62	0.01		
76	45	46	"	"	0.64	<0.01		
77	46	47	"	"	1.35	<0.01		
78	47	48	"	"	1.58	<0.01		
79	48	49	"	"	0.74	<0.01		
80	49	50	"	"	0.43	<0.01		
81	50	51	"	"	0.61	<0.01		
82	51	52	"	"	0.43	<0.01		
83	52	53	"	"	0.56	<0.01		
84	53	54	"	"	9.10	0.04		
85	54	55	"	"	7.6	0.02		
86	55	56	"	"	0.04	<0.01		
87	56	57	"	"	0.29	<0.01		
88	57	58	"	"	0.22	0.01		
89	58	59	"	"	0.04	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 360/2

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 7490	59	60	1.0	1.0	0.6	0.01		
91	60	61	"	"	0.76	0.01		
92	61	62	"	"	0.39	0.03		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 360/2

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 - 14.85	B lens	3-10		Clay,Chl,Carb.	60° : 12.5	100	61	
14.85 - 19.45	Bh	10-15		Clay,Chl	53° : 18.1m	100	45	broken
19.45 - 26.0	DECLINE FAULT ZONE							pug
26.0 - 34.6	PGH	6		Chl,Clay,Carb		99	73	
34.6 - 37.0	Gh	8		Chl,Carb,Sulph		100	77	
37.0 - 58.0	M/M and Gh	4		Chl,Carb,Sul,Clay	60° : 37.5m 77° : 45.9m	100	80	
58.0 - 67.12	Bh/Ph & L.V.	6-9		Chl,Clay,Carb,Sul		100	62	
67.12 - 79.65	Bh.Ph	10		Chl,Clay,Carb,Sul	70° : 72.6m	100	58	
79.65 - 91.0	Gr	7-10		?Clay,Mica,Sulph		100	72	
EOH 91.0 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. 46TT

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/2

0.0 - 14.85 m — B LENS

B lens consisting of the following subdivisions.
0.0 - 1.0 m Garnet skarn with minor unreplaced marbles and some disseminated scheelite.

1.0 - 6.45 m Marble - barren grey to cream coloured with minor development of grossular. The unit is somewhat fractured and disturbed.

6.45 - 9.40 m Garnet skarn - grossular and ?andradite garnet skarn with fair scheelite mineralization. Minor pyroxene and unreplaced marble is also present. All contacts with unreplaced marbles are gradational.

9.40 - 12.90 m Marble - barren greyish coloured with minor grossular and numerous calcite/carbonate veins fracturing is common. Numerous open vughs and cavities (calcite lined) are also present.

?so 60^{o} to LCA at 12.5 m.

12.90 - 14.85 m Garnet pyroxene skarn - intermixed and somewhat fractured with some scheelite mineralization.

14.85 - 19.45 m — BIOTITE HORNFELS

Disturbed and fractured biotite hornfels with numerous pyroxene hornfels zones and patches. Some of the broken zones could represent faults.

?so 53^{o} to LCA at 18.1 m.

19.45 - 26.00 m — DECLINE FAULT ZONE

Badly borken, brecciated and fractured fault zone. An excellent breccia occurs around 22.2 m and 25.4 m. The core is completely incompetent. The rock type present consists of biotite hornfels with some pyroxene hornfels. The contact with pyroxene garnet hornfels below appears faulted.

26.00 - 34.60 m — PYROXENE GARNET HORNFELS

Typical podded pyroxene garnet hornfels with marble fragments up to 5cm in size. Reaction rims of grossular garnet are common. From 27.0 - 34.6 m, the pyroxene garnet hornfels is variably mineralized with increasing pyroxene hornfels and skarn towards the base. The unit is somewhat fractured with numerous clayey zones.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/2

34.60 - 36.90 m — GARNET SKARN - UPPER C LENS

Coarse grained andradite garnet skarn with fine disseminated scheelite throughout. White interstitial calcite is common.

36.90 - 38.15 m — MARBLE MARKER

Interbedded sequence of marble, biotite hornfels and pyroxene hornfels. Minor puggy core (2 cm) occurs around 37.9 and possibly represents a minor fault. Rare scheelite is present.

?So 60° to LCA at 37.5 m.

38.15 - ?41.9 m — BANDED SKARN OR ?MINERALIZED MARBLE MARKER

Peculiar unit consisting of banded/bedded skarn and numerous fine greenish ?pyroxene rich zones/bands containing abundant scheelite (>1% visual estimate). The unit most probably represents mineralized marble marker. The base of the unit could well extend down to 44 m.

Scheelite mineralization is present throughout. Numerous carbonate rich veins/ and shears are present.

So 73° to LCA at 38.85 m.

Probable Fault at 41.2 - shearing and brecciation.

?41.9 - ?55.0 m — BANDED SKARN - LOWER C LENS

Well banded / bedded andradite garnet skarn with numerous interbeds of biotite hornfels / pyroxene hornfels and calcite hornfels. Fair to good scheelite mineralization is present. Some small scale micro faults are present. The core appears quite competent throughout. The following bedding angles were noted.

So 83° to LCA at 43.0 m
So 77° to LCA at 45.9 m
So 83° to LCA at 49.1 m
So 77° to LCA at 51.9 m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/2

?55.0 - 61.80 m

BANDED FOOTWALL BEDS

Well banded/bedded sequence consisting of marble, pyroxene hornfels and grossular garnet with minor scheelite mineralization. Probable fault occurs from 55.0 - 55.1, (sheared, clayey material). From 58.0 - 61.80 the unit consists mainly of biotite hornfels with some pyroxene hornfels and partly skarnetised marble unit containing minor scheelite. Some grossular garnet is also present. The subunit appears to overlie the Lower Volcanics. Heavy brecciation (recemented) and/or fracturing occurs around 61.2 m).

So 82° to LCA at 57.4 m.

61.80 - ?67.10 m

LOWER VOLCANICS

Lower Volcanics unit consisting of a dark green coloured rock with numerous dark mafic (?) spots/flecks up to 1mm in size.

Around 67.0 - 67.10 m, the unit is very sheared, clayey and brecciated, possibly representing a fault zone or the lower sheared contact of the volcanics.

67.10 - 79.65 m

BIOTITE HORNFELS / PYROXENE HORNFELS

Well bedded biotite hornfels/pyroxene hornfels with numerous pink aplite dykes/veins (ie 72.7 - 73.35 m and 74.25 m). The core is somewhat fractured and broken with possible numerous shears/faults (ie recemented breccia around 69.1 m and associated fractured ground to 69.4 m; 75.6 m (some rubble) and 79.0 - 79.65 m. Microfaulting is common.

So 70° to LCA at 72.6 m
So 75° to LCA at 75.3 m
So 80° to LCA at 77.85 m

79.65 - 91.00 m

GRANITE / ADAMELLITE

Fine to coarse grained granite with the following noticeable subdivisions.
79.65 - 80.0 Hybrid rock with intermixed sediment and fine grained granite.

80.7 - 91.0 Coarse grained granite with numerous massive 'barren' white quartz bands/zones up to 30cm wide.

No scheelite present in granite.

EOH 91.00 m

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. D 360/1

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: S13 -200 m. R.L. Drill Cuddy

PURPOSE OF HOLE: To test C lens routine oreblocking

CO-ORDS: 220360 E 564050 N

INCLINATION: -90° Vertical

BEARING: °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 172°30' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220359.91 E 564049.99 N

R.L. OF COLLAR: R- 201.63

INCLINATION OF HOLE: -89°25'

PICKED UP BY: R.J.H. DATE: 16-6-78

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 0-15 m, 15 m @ 0.61% WO_3 B lens
19-26 m, 7 m @ 0.92% WO_3

Hole abandoned in Decline Fault Zone.

DRILLING

DATE COMMENCED: 3-6-78 DATE TERMINATED:

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE: BQ
DEPTH: 1m

CORE: SIZE: 46TT
DEPTH: 76.5 m

WEDGE PLACED: DEPTH:

EXTENSION:

FINAL DEPTH: 76.5 m

REASON FOR TERMINATION: Abandoned in Decline Fault/Grassy River Fault.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: 73 m

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 360/1

Survey method: Singleshot Camera
Final depth: 76.5 m
Casing depth:

Depth surveyed to: 73 m
Date surveyed Various duties as hole progressed
Surveyed by: L.Denby
Checked by: G. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		S	W
27	200	190	2.5	-87.5	26.97	1.16	0.20
47	194	184	1.75	-88.25	46.96	1.77	0.24
55	213	203	3.0	-87.0	54.95	2.16	0.40
73	198	188	2.75	-87.25	72.93	2.97	0.51
EOH 76.5 m							

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 360/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.3	3.3	3.3	100 sl broken
3.3 - 6.3	3.0	3.0	100
6.3 - 9.6	3.3	3.3	100
9.6 - 12.5	2.9	2.9	100
12.5 - 15.5	3.0	3.0	100
15.5 - 18.5	3.0	3.0	100
18.5 - 20.9	2.4	2.4	100
20.9 - 23.9	3.0	3.0	100
23.9 - 24.6	0.7	0.75	107
24.6 - 26.0	1.4	1.4	100
26.0 - 27.2	1.2	1.2	100
27.2 - 28.6	1.4	1.5	107
28.6 - 31.6	3.0	3.0	100
31.6 - 34.6	3.0	3.0	100
34.6 - 36.6	2.0	2.0	100
36.6 - 38.4	1.8	1.8	100
38.4 - 39.1	0.7	0.7	100
39.1 - 40.4	1.3	1.3	100 broken
40.4 - 41.3	0.9	0.9	100 broken
41.3 - 42.4	1.1	1.1	100 broken
42.4 - 42.9	0.5	0.35	70 broken
42.9 - 43.5	0.6	0.5	broken
43.5 - 44.2	0.7	0.4	broken
44.2 - 45.8	1.6	1.0	broken
45.8 - 46.5	0.7	0.3	
46.5 - 47.1	0.6	0.3	
47.1 - 47.7	0.6	0.3	
47.7 - 48.8	1.1	0.8	
48.8 - 50.0	1.2	0.9	
50.0 - 51.4	1.4	0.3	
51.4 - 51.9	0.5	0.4	
51.9 - 52.3	0.4	0.3	
52.3 - 52.9	0.6	0.5	
52.9 - 53.4	0.5	0.3	
53.4 - 54.0	0.6	0.3	
54.0 - 56.0	2.0	0.8	
56.0 - 57.0	1.0	0.0	
57.0 - 57.9	0.9	0.03	
57.9 - 58.9	1.0	0.03	
58.9 - 59.6	0.7	0.2	
59.6 - 60.8	1.2	0.8	
60.8 - 61.4	0.6	0.5	
61.4 - 63.3	1.9	1.9	100
63.3 - 64.0	0.7	0.7	100
64.0 - 64.5	0.5	0.5	100
64.5 - 65.0	0.5	0.4	80
65.0 - 65.8	0.8	0.8	100
65.8 - 67.5	1.7	1.2	71
67.5 - 69.0	1.5	1.0	67

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 360/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
69.0 - 69.8	0.8	0.5	63
69.8 - 70.5	0.7	0.4	57
70.5 - 71.5	1.0	0.6	60
71.5 - 72.05	0.55	(?)0.9	164
72.05 - 73.0	0.95	(?)1.0	105
73.0 - 74.2	1.2	1.2	100
74.2 - 74.8	0.6	0.5	83
74.8 - 76.0	1.2	0.7	58
76.0 - 76.5	0.5	0.5	100
EOH 76.5 m (Abandoned).			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 360/1

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT AOC)	JOINT FILLING	BEDDING ANGLE (W R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 3.3	Gh/Ph	15		Clay,chl,carb		100	40	
3.3 - 18.0	Gh/Ph	4-6		Clay,carb,chl,sul	27° (?)	100	96	
18.0 - 26.35	Gh/Ph	4-5		Chl,carb,sul,clay	20°:26.35m	100	91	
26.35 - 36.60	Bh	7		Chl,clay,carb,sul	37°:28.3 m 25-30:36.3m	100	79	S_1 25°:40.3 m
36.6 - 42.2	Bh	10		Chl,clay,carb,sul		100	38	broken
42.2 - 76.5	DECLINE FAULT ZONE							
EOH 76.5 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

ASSAY DATA

D.D.H. No. D 360/1

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 7969	0	1	1.0	1.0	0.33	0.03		
70	1	2	"	"	0.66	0.03		
71	2	3	"	"	0.77	0.06		
72	3	4	"	"	0.92	0.06		
73	4	5	"	"	0.48	0.02		
74	5	6	"	"	0.76	0.04		
75	6	7	"	"	0.56	0.04		
76	7	8	"	"	0.65	0.04		
77	8	9	"	"	0.52	0.03		
78	9	10	"	"	0.62	0.03		
79	10	11	"	"	0.75	0.04		
80	11	12	"	"	0.56	0.03		
81	12	13	"	"	0.90	0.06		
82	13	14	"	"	0.21	0.01		
83	14	15	"	"	0.53	0.02		
84	15	16	"	"	0.26	0.01		
85	16	17	"	"	0.08	<0.01		
86	17	18	"	"	0.02	<0.01		
87	18	19	"	"	0.20	0.01		
88	19	20	"	"	0.45	0.02		
89	20	21	"	"	1.30	0.06		
90	21	22	"	"	0.52	0.03		
91	22	23	"	"	0.56	0.04		
92	23	24	"	"	1.65	0.08		
93	24	25	"	"	1.37	0.06		
94	25	26	"	"	0.56	0.01		
95	26	27	"	"	0.03	<0.01		
96	27	28	"	"	0.23	<0.01		
97	28	29	"	"	0.45	0.01		
98	29	30	"	"	0.02	<0.01		

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

Determined by:

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/1

0.0 - 26.35 m

B LENS

B lens consisting of the following subdivision.

0.0 - 15.85 m

SKARN - PYROXENE HORNFELS

Intermixed skarn/pyroxene hornfels with good disseminated scheelite throughout. The dominant garnet mineral appears to be andradite garnet with very little grossular garnet. Quartz, calcite and epidote occur as accessaries.

From 0.0 - 2.0 m, the core is broken, fractured and disturbed with numerous calcite veins - probable closely associated to a fault.

Overall, calcite veining is common throughout, particularly from/around 8.25 m, 14.75 m and 15.6m.

Calcite and clay along joint and fracture surfaces are common.

15.85 - 18.00 m

MARBLE

Grey barren marble with minor pyroxene hornfels developed adjacent to the skarn horizons. Bedding is difficult to distinguish but may be at approx. 27^{o} to LCA.

Clay filled joints and fractures are common.

18.00 - 26.35 m

SKARN - PYROXENE HORNFELS

Intermixed skarn-pyroxene hornfels with fair to good scheelite mineralization. The unit is similar to that occurring from 0.0 - 15.85 m. The core appears competent and massive throughout. Possible bedding (So) at base of unit is approx. 20^{o} to LCA.

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 360/1

26.35 - ?42.20 m

BIOTITE HORNFELS

Grey to dark brown coloured slightly disturbed and sheared biotite hornfels with minor pyroxene actinolite hornfels alteration zones and patches. Some garnet - pyroxene bands with some scheelite occur in the tzp 3m of the unit. (Some broken core also present).

The core becomes increasingly broken and fractured, with associated shearing from 36.6 m onwards.

So 37° to LCA at 28.3 m
?So 28° to LCA at 30,85m
So 25-30° to LCA at 36.3 m
S_1 25° to LCA at 40.3 m

42.2 - 76.50 m

DECLINE FAULT

Extremely broken, brecciated, fractured, clay chlorite, fault zone with abundant carbonate (quartz (?)) veining throughout.

Chlorite and slickensides on joint surfaces are common.

The core is completely incompetent.

EOH 76.50 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/57 Dolphin

PLANNING

PROPOSER: C. Kendall DEPTH:

LOCATION: W50 280 m level

PURPOSE OF HOLE: Test footwall of mineralisation

PROPOSED CO-ORDS: 220 345 E 563 917 N

INCLINATION: -90°

BEARING: °Grid °Mag

TARGET: E N

DEPTH: 25 m

CHECKED BY: S.G. Brown DATE: 01.03.83

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 345.0 E 563 916.94 N

R.L. OF COLLAR: -278.19

INCLINATION OF HOLE: -90°

PICKED UP BY: B.H. Lennon DATE: 18.04.83

SUMMARY

LOGGED BY: C.J. Kendall

RESULTS: 0.0 - 10.0 m - 10 m at 1.21% W03

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR: L. Limbourne

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 23.5 m

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 23.5 m

REASON FOR TERMINATION: Below ore zone.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER: Minor

COMMENTS ON DRILLING CONDITIONS: Ok

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D340/57

Surveyed method: Not surveyed
Final depth:
Casing depth:

Depth surveyed to:
Date surveyed:
Surveyed by:
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/57

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
2.7	2.7	2.1	78
5.7	3.0	3.1	103
8.6	2.9	3.0	103
12.1	3.5	3.5	100
15.0	2.9	2.8	97
18.1	3.1	3.3	106
19.9	1.8	1.6	89
22.0	2.1	2.4	114
23.5	0.5	1.5	100

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D340/57

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D14112	0.0	1.0	1.0	1.0	3.40			
14113	1.0	2.0	1.0	1.0	3.60			
14114	2.0	3.0	1.0	1.0	0.90			
14115	3.0	4.0	1.0	1.0	0.36	10 m	@ 1.21%	W03
14116	4.0	5.0	1.0	1.0	0.21			
14117	5.0	6.0	1.0	1.0	1.05			
14118	6.0	7.0	1.0	1.0	0.37			
14119	7.0	8.0	1.0	1.0	0.28			
14120	8.0	9.0	1.0	1.0	0.70			
14121	9.0	10.0	1.0	1.0	0.11			
14122	10.0	11.0	1.0	1.0	0.11			
14123	11.0	12.0	1.0	1.0	0.14			
14124	12.0	13.0	1.0	1.0	0.15			
14125	13.0	14.0	1.0	1.0	0.11			
14126	14.0	15.0	1.0	1.0	0.15			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. D 340/57

0.0 - 9.0 m — Banded Andradite Skarn

A mottled banded sequence of andradite skarn, biotite/pyroxene hornfels and grossularite.

Mineralisation is very patchy with small pods being extremely high grade.

There is one prominent joint parallel to L.C.A. which shows sulphide infilling.

Joints: 0^{o} L.C.A.
35^{o} L.C.A.
55^{o} L.C.A.

9.0 - 10.0 m — Banded Footwall Beds

Tightly banded, in places disturbed sequence of bh, ph and unreplaced marble.

There is some scheelite visible but very low grade.

The footwall contact over the lower 30 cm is heavily disturbed. All units are heavily cross fractured and show some signs of being baked.

10.0 - 14.7 m — Biotite Pyroxene Hornfels

10.0 - 12.4 m — Banded, heavily jointed bph with the largest stick of core being 10 cm.

12.4 - 14.7 m — The unit is podded with marble and grossularite, mottled with concentrations of feldspar phenocrysts and intersected by a 6 cm wide quartz-feldspar porphyry at 12.5 m.

The lower contact has a very high sulphide content.

14.7 - 17.6 m — Lower Volcanics

A dark, licorice green, actimolite rich rock.

Unit is heavily fractured below 16.5 m, with chlorite clay on joint surfaces.

Jointing 30 - 50^{o} L.C.A.

17.6 - 23.5 m — Biotite Pyroxene Hornfels

Banded, with higher pyroxene content in upper 2 metres.

Below 20.3 m, the bh is laced with fine calcite veins which show extensive distortion.

E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/56

PLANNING

PROPOSER: C. Kendall DEPTH:

LOCATION: W50 280 Level

PURPOSE OF HOLE: Test lower orebody in relation to Decline Fault

PROPOSED CO-ORDS: 220 345 E 563 917 N

INCLINATION: -30

BEARING: 102 °Grid °Mag

TARGET: E N

DEPTH: 35 m

CHECKED BY: S.G. Brown DATE: 05.01.83

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 103°04' °Grid °Mag

SURVEYED IN BY: M.G. Marchant DATE:

ACTUAL CO-ORDS: 220346.44 E 563916.61 N

R.L. OF COLLAR: -277.59

INCLINATION OF HOLE: -26°

PICKED UP BY: B.H. Lennon DATE: 18.04.83

SUMMARY

LOGGED BY: C.J. Kendall

RESULTS: 0.0 - 12.0 m - 12 m at 2.60% WO3

DRILLING

DATE COMMENCED: 26.01.83 DATE TERMINATED:

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION: Through ore zone

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED: Hole cemented to 15 m due to bad ground.

BORE HOLE SURVEY: No.

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 340/56

Surveyed method: Not surveyed
Final depth:
Casing depth:

Depth surveyed to:
Date surveyed:
Surveyed by:
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/56

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
2.9	2.9	2.8	97
5.6	2.7	2.7	100
8.5	2.9	2.8	97
11.5	3.0	3.0	100
14.56	3.06	3.2	105
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 340/56

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D14127	0.0	1.0	1.0	1.0	3.80			
14128	1.0	2.0	1.0	1.0	1.36			
14129	2.0	3.0	1.0	1.0	0.68			
14130	3.0	4.0	1.0	1.0	1.56			
14131	4.0	5.0	1.0	1.0	2.22			
14132	5.0	6.0	1.0	1.0	1.04	12 m	@ 2.60%	WO3
14133	6.0	7.0	1.0	1.0	9.20			
14134	7.0	8.0	1.0	1.0	0.94			
14135	8.0	9.0	1.0	1.0	3.60			
14136	9.0	10.0	1.0	1.0	6.00			
14137	10.0	11.0	1.0	1.0	4.60			
14138	11.0	12.0	1.0	1.0	4.00			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 340/56

0.0 - 1.70 m	Andradite Skarn. Massive andradite skarn with large scheelite crystals visible in the top 10 cm. There are 2 mottled zones rich in calcite veinlets. Mineralisation appears to be evenly disseminated.
1.70 - 3.4 m	Disturbed Zone Pyroxene, biotite hornfels rich breccia zone. Clasts and major structure sub parallel to L.C.A. Clasts are all lozenge shaped and are predominantly marble. The surface of the major structure shows slickensiding and some evidence of drag. The contact with the andradite skarn below shows a marked reaction zone. From 2.20 to 2.50 m is a pod of heavily jointed marble.
3.40 - 11.80 m	Andradite Skarn. Similar to previous intersection with large scheelite crystals, extensive mineralisation and regular spacings of mottled calcite enriched zones. The main difference is textural. There are numerous pyroxene rich bands at various orientations to L.C.A. At 8.50 - 8.70 m this pyroxene band is associated with a small breccia zone as above. The most common orientation is 15 - 20° L.C.A. The lower section of this sequence appears to be crudely banded suggesting that this may be Lower C Lens skarn.
11.80 - 12.7 m	Biotite Pyroxene Hornfels. A finely laminated sequence with jointing parallel to bedding at 18° L.C.A.

..../2

12.7 - 12.9 m	Spotted hornfels. A licorice green unit with fine white specks throughout. The specks show a preferred orientation parallel to bedding at 18° L.C.A.
12.9 - 14.56 m	Fault. Extremely broken zone of biotite hornfels, marble and pyroxene rich clasts. The unbroken core shows a very angular breccia zone in a weathered matrix.

E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/55 Dolphin

PLANNING

PROPOSER: C. Kendall DEPTH:

LOCATION: W50 280 Level

PURPOSE OF HOLE: Test Decline Fault position

PROPOSED CO-ORDS: 220 345 E 563 917 N

INCLINATION: 0

BEARING: 102 °Grid °Mag

TARGET: E N

DEPTH: 25 m

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 103° 14' °Grid °Mag

SURVEYED IN BY: M. Marchant DATE:

ACTUAL CO-ORDS: 220,346.57 E 563 916.59 N

R.L. OF COLLAR: -276.85

INCLINATION OF HOLE: +1°10'

PICKED UP BY: B. Lennon DATE: 18.04.83

SUMMARY

LOGGED BY: C. Kendall

RESULTS: 1.0 m to 4.0 m - 4 m at 1.33% W03

DRILLING

DATE COMMENCED: 24.01.83 DATE TERMINATED: 25.01.83

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46 TT
DEPTH: 6.5 m

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 6.5 m

REASON FOR TERMINATION: Could not penetrate broken zone in footwall of Marble Marker

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER: No

COMMENTS ON DRILLING CONDITIONS: Ground impenetrable

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 340/55

Surveyed method: Not surveyed.
Final depth:
Casing depth:

Depth surveyed to:
Date surveyed:
Surveyed by:
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/55

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
3.0	3.0	2.9	
5.3	2.3	2.4	
6.3	1.0	1.0	
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 340/55

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D14139	0.0	1.0	1.0	1.0	3.8			
D14140	1.0	2.0	1.0	1.0	0.26	4 m @	1.33%	
D14141	2.0	3.0	1.0	1.0	0.88			
D14142	3.0	4.0	1.0	1.0	0.40			
D14143	4.0	5.0	1.0	1.0	0.07			

SPECIFIC GRAVITY

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

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. D 340/55

0.00 - 3.4 m	Andradite skarn. A strong mineralised sequence showing very crude banding. From 3.0 to 3.4 the sequence is disturbed. There is a large unreplaced marble pod, numerous small (1 mm) bands of dark material (possible pyroxene). The lower contact shows evidence of baking with a definite reaction zone grading from a coarse breccia to extremely fine lamination.
3.4 - 4.8 m	Marble Very disturbed with numerous joints.
4.8 - 6.30 m	Fault Zone. Broken crumbly zone of biotite hornfels (strongly disced) and actimolite rich weathered material.
E.O.H.	

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/54 Dolphin

PLANNING

PROPOSER: C.J. Kendall **DEPTH:** 40 m

LOCATION: W54/260 m R.L.

PURPOSE OF HOLE: Test Decline Fault and mineralised footwall beds

PROPOSED CO-ORDS: 220 345 E 563 943 N

INCLINATION: -66°

BEARING: 100 °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: S.G. Brown **DATE:** 24.6.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: **DATE:**

ACTUAL CO-ORDS: 220 345 E 563 943 N

R.L. OF COLLAR: 263.6

INCLINATION OF HOLE: -66°

PICKED UP BY: B. Lennon **DATE:** 9.8.83

SUMMARY

LOGGED BY: C.J. Kendall

RESULTS: 0.0 m - 20.0 m: 20 m @ 1.61% WO3
This hole collar was lost due to face being fired before pickup.

DRILLING

DATE COMMENCED: 1.7.82 **DATE TERMINATED:** 6.7.82

DRILLER/CONTRACTOR: K.I.S.

CASING: **SIZE:**
DEPTH:

CORE: **SIZE:** 46TT
DEPTH: 35.0

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

EXTENSION:

FINAL DEPTH: 35.0 m

REASON FOR TERMINATION: Below ore zone

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: No

BORE HOLE SURVEY: Single shot

WATER: Minor

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D340/54 Dolphin

Surveyed method: Single shot
Final depth: 35.0
Casing depth:

Depth surveyed to: 35 m
Date surveyed: 6.7.82
Surveyed by: R. Drake
Checked by: C. Kendall

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			
35	105°	S85°E	24°30'	-64°30'			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/54 Dolphin

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 2.70	2.7	2.5	93
2.70 - 5.00	2.3	2.5	109
5.00 - 8.00	3.0	3.0	100
8.00 - 10.00	2.0	1.9	95
10.00 - 13.00	3.0	3.0	100
13.00 - 16.00	3.0	3.0	100
16.00 - 18.70	2.7	2.6	96
18.70 - 20.10	1.4	1.4	100
20.10 - 23.10	3.0	3.0	100
23.10 - 25.30	2.2	2.3	105
25.30 - 27.60	2.3	2.4	104
27.60 - 30.50	2.9	3.0	103
30.50 - 32.60	2.1	2.1	100
32.60 - 35.00	2.4	2.2	92
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 340/54

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D14024	0.0	1.0	1.0	1.0	0.67			
14025	1.0	2.0	1.0	1.0	7.20			
14026	2.0	3.0	1.0	1.0	4.00			
14027	3.0	4.0	1.0	1.0	1.05			
14028	4.0	5.0	1.0	1.0	2.00			
14029	5.0	6.0	1.0	1.0	1.65			
14030	6.0	7.0	1.0	1.0	1.00			
14031	7.0	8.0	1.0	1.0	0.80			
14032	8.0	9.0	1.0	1.0	6.40			
14033	9.0	10.0	1.0	1.0	1.10			
14034	10.0	11.0	1.0	1.0	1.30			
14035	11.0	12.0	1.0	1.0	6.20			
14036	12.0	13.0	1.0	1.0	0.61			
14037	13.0	14.0	1.0	1.0	0.74			
14038	14.0	15.0	1.0	1.0	0.30			
14039	15.0	16.0	1.0	1.0	1.00			
14040	16.0	17.0	1.0	1.0	2.90			
14041	17.0	18.0	1.0	1.0	0.55			
14042	18.0	19.0	1.0	1.0	0.43			
14043	19.0	20.0	1.0	1.0	0.97			
14044	20.0	21.0	1.0	1.0	0.15			
14045	21.0	22.0	1.0	1.0	0.09			
14046	22.0	23.0	1.0	1.0	0.11			
14047	23.0	24.0	1.0	1.0	0.13			
14048	24.0	25.0	1.0	1.0	0.08			
14049	25.0	26.0	1.0	1.0	0.20			
14050	26.0	27.0	1.0	1.0	0.12			
14051	27.0	28.0	1.0	1.0	0.13			
14052	28.0	29.0	1.0	1.0	0.13			
14053	29.0	30.0	1.0	1.0	0.14			

SPECIFIC GRAVITY

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

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D340/54

0.0 - 9.8 m	Andradite Skarn
	A massive, heavily mineralised skarn showing some minor bedding.
	Garnets are generally fine, but become larger when associated with random calcite pods.
	Large scheelite grains visible with naked eye from 1.7 m to 2.1 m (a sample taken for specimen purpose).
	Banding becomes more defined from 2.7 m to 4.6 m. At 3.1 m there is a narrow band of biotite hornfels bounded by 1 cm wide bands of pyroxene hornfels. There are three narrow bands of unreplaced marble at 3.7 m. Banding is at 30^{o} LCA.
	Core is very broken and crumbly at 4.5 m.
9.8 - 20.1 m	Banded Garnet Skarn
	Very similar to previous unit except banding is more pronounced. From 9.8 m to 10.3 m, garnet is predominantly grossular.
	Banding is at 30^{o} LCA.
	Large scheelite crystals are visible at 12 m.
	There are numerous bands of biotite hornfels throughout the interval.
	There appears to be an increase in calcite podding with depth.
20.1 - 27.6 m	Banded footwall beds
	Essentially unmineralised biotite hornfels, pyroxene hornfels and marble interbeds.
	Bedding is at 30^{o}LCA.
	Minor mineralisation occurs in the top metre.
	From 23.0 to 25.4 m the core is heavily jointed and broken with some chloritic material on joint surfaces.
	Evidence of displacement of bedding across a joint (80^{o}LCA) at 23.6 m.

...../2

27.6 - 28.7 m — Mineralised Footwall Beds

A weakly mineralised section similar to previous unit.

28.7 - 35.0 m — Lower Volcanics

A fine grained, grey green rock with a mottled appearance. Minor feldspars appear as white blotches.

Sulphides (mostly pyrite) account for the mottled appearance to 31.5 m.

From 31.5 m to E.O.H. sulphides appear to change to pyrrhotite. The texture of the rock changes. The change in sulphides also reflects a change in ground conditions; below 31.5, jointing is much more prominent, the ground is more broken and the chlorite content appears to increase.

The content between the two units is marked by a 2 cm thick chlorite band showing some evidence of movement.

Jointing is variable with the most common joints being 40^{o}LCA and 50^{o}LCA.

E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/53

PLANNING

PROPOSER: C.J. Kendall DEPTH: 50 m

LOCATION: W54/260 m R.L.

PURPOSE OF HOLE: Test footwall mineralisation and position of granite contact

PROPOSED CO-ORDS: 220 345 E 563 943 N

INCLINATION: -45°

BEARING: 280 °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: S.G. Brown DATE: 26.04.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 345 E 563 943 N

R.L. OF COLLAR: -263.6

INCLINATION OF HOLE: -45°

PICKED UP BY: B. Lennon DATE: 9.8.83

SUMMARY

LOGGED BY: C.J. Kendall

RESULTS: 0.0 to 9.0 m: 9 m @ 1.28% WO3

This hole was lost due to face being fired before pickup

DRILLING

DATE COMMENCED: 6.7.82 DATE TERMINATED: 11.7.82

DRILLER/CONTRACTOR: K.I.S.

CASING: SIZE:
DEPTH:

CORE: SIZE: 46 TT
DEPTH: 20.3

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION: No

FINAL DEPTH: 20.3 m

REASON FOR TERMINATION: Below ore zone

CONDITION OF HOLE ON COMPLETION:

CASING: No

CEMENTED: No

BORE HOLE SURVEY: No

WATER: Minor

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D340/53

Surveyed method: Not surveyed.
Final depth:
Casing depth:

Depth surveyed to:
Date surveyed:
Surveyed by:
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/53

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.00	3.00	2.50	83
3.00 - 6.20	3.20	3.20	100
6.20 - 9.20	3.00	3.00	100
9.20 - 10.90	1.70	1.70	100
10.90 - 12.50	1.60	1.60	100
12.50 - 15.50	3.00	3.00	100
15.50 - 18.40	2.90	2.80	96
18.40 - 20.30	1.90	2.10	110
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D340/53

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D14054	0.0	1.0	1.0	1.0	0.99			
14055	1.0	2.0	1.0	1.0	0.46			
14056	2.0	3.0	1.0	1.0	0.66			
14057	3.0	4.0	1.0	1.0	4.50			
14058	4.0	5.0	1.0	1.0	0.33			
14059	5.0	6.0	1.0	1.0	0.54			
14060	6.0	7.0	1.0	1.0	1.60			
14061	7.0	8.0	1.0	1.0	1.80			
14062	8.0	9.0	1.0	1.0	0.66			
14063	9.0	10.0	1.0	1.0	0.14			
14064	10.0	11.0	1.0	1.0	0.09			
14065	11.0	12.0	1.0	1.0	0.09			
14066	12.0	13.0	1.0	1.0	0.02			
14067	13.0	14.0	1.0	1.0	0.03			
14068	14.0	15.0	1.0	1.0	0.37			
14069	15.0	16.0	1.0	1.0	0.14			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No.: D 340/53

0.0 - 15.6 m	Banded footwall beds
0 - 8.8 m	Well mineralised (ore grade) banded skarn.
	From 5.5 m, bands of bh, ph and ch become more prominent.
	Banding is at 80°LCA
8.8 - 15.6 m	Poorly mineralised footwall beds.
	Upper sequence to 12.3 m is biotite and pyroxene rich with little marble.
	Below 12.3 m, the marble content increases and the bh content decreases.
	Core is broken at 10.8 m and at 11.8 m there is possible fault zone.
	Mineralisation increases in last metre to be about 0.7% WO3 (Lamp Estimate)
	Narrow aplite (4 cm) exists at 14.4 m.
15.6 - 16.8 m	Lower Volcanics
	Dark grey, finely mottled rock rich in sulphides. Core is very competent with only 1 joint at 15.3 m. 55°LCA.
16.8 - 18.5 m	Biotite Pyroxene Hornfels
	A strongly banded unit showing a tendency to break easily along bedding planes (70°LCA).
18.5 - 19.0	Aplite
	Fine grained, pink grey colour. Upper contact possibly faulted.
19.0 - 20.3 m	Biotite pyroxene hornfels
	Similar to above.

E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 340/52 Dolphin

PLANNING

PROPOSER: C.J. Kendall DEPTH: 27 m

LOCATION: W50/260 m R.L.

PURPOSE OF HOLE: Test mineralised footwall beds

PROPOSED CO-ORDS: 220 345 E 563 915 N

INCLINATION: -45°

BEARING: 280° °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: S.G. Brown DATE: 24.06.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 342.4 E 563 914.5 N

R.L. OF COLLAR: -262.8

INCLINATION OF HOLE: -45°

PICKED UP BY: B.H. Lennon DATE: 25.06.82

SUMMARY

LOGGED BY: C. Kendall

RESULTS: 23,0 m @ 0.68% WO3

DRILLING

DATE COMMENCED: 24.06.82 DATE TERMINATED: 28.06.82

DRILLER/CONTRACTOR: King Island Scheelite

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. 340/52 Dolphin

Surveyed method: Not surveyed.
Final depth:
Casing depth:

Depth surveyed to:
Date surveyed:
Surveyed by:
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.			

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 340/52 Dolphin

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
2.8	2.8	2.8	100
4.8	2.0	1.8	90
6.8	2.0	2.0	100
9.7	2.9	2.9	100
12.7	3.0	3.0	100
15.5	2.8	2.9	103
18.0	2.5	3.0	120
21.4	3.4	3.0	88
24.5	3.1	3.1	100
27.0	2.5	2.4	96
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D340/52 Dolphin

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
13923	0	1	1.0	1.0	14.5			
13924	1	2	1.0	1.0	0.80			
13925	2	3	1.0	1.0	0.54			
14001	3	4	1.0	1.0	2.00			
14002	4	5	1.0	1.0	1.10			
14003	5	6	1.0	1.0	0.40			
14004	6	7	1.0	1.0	1.05			
14005	7	8	1.0	1.0	0.52			
14006	8	9	1.0	1.0	1.20			
14007	9	10	1.0	1.0	0.66			
14008	10	11	1.0	1.0	0.83			
14009	11	12	1.0	1.0	0.80			
14010	12	13	1.0	1.0	0.35			
14011	13	14	1.0	1.0	0.56			
14012	14	15	1.0	1.0	1.50			
14013	15	16	1.0	1.0	0.65			
14014	16	17	1.0	1.0	0.07			
14015	17	18	1.0	1.0	1.40			
14016	18	19	1.0	1.0	0.07			
14017	19	20	1.0	1.0	0.14			
14018	20	21	1.0	1.0	0.08			
14019	21	22	1.0	1.0	0.67			
14020	22	23	1.0	1.0	0.74			
14021	23	24	1.0	1.0	0.53			
14022	24	25	1.0	1.0	0.18			
14023	25	26	1.0	1.0	0.16			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 340/52 Dolphin

0.0 - 2.2 m — Garnet Pyroxene Hornfels

A well mineralised unit with large scheelite crystals. There is crude banding with some scheelite crystals following banding. The core is strongly jointed and broken. The prominent joint is parallel to L.C.A.

2.2 - 3.0 m — Biotite Hornfels

A band of bh with some pyroxene rich bands. Minor sulphides, mostly pyrrhotite occur on joints. There are some narrow bands of weakly mineralised skarn. The unit possibly equates to the marble marker.

3.0 - 12.0 m — Andradite Skarn

Massive andradite skarn, some banding evident. Scheelite mineralisation is very fine grained. Ground conditions appear good. There is no broken core nor any major jointing.

12.0 - 25.3 m — Banded Footwall Beds (Mineralised)

Repeated bands of bh, ch, gh and bph with banding at 90° L.C.A.
Mineralisation is good grade (0.8% WO3) but is not consistent enough to warrant extraction.
The footwall of the ore from lamp estimate would be at 18.3 m.

25.3 - 27.0 m — Biotite Pyroxene Hornfels

A weakly banded, well jointed unit showing no mineralisation.
Joints are at 45°LCA
90°LCA
60°LCA

E.O.H.

OK to copy

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/51

PLANNING

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

LOCATION: W54 -260m Level

PURPOSE OF HOLE: Test F/W of L. Wedge O/B

PROPOSED CO-ORDS: 220 338 E 563 945 N

INCLINATION: -90°

BEARING: °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220340.6 E 563943.4 N

R.L. OF COLLAR: -263.41

INCLINATION OF HOLE: -89°

PICKED UP BY: B. Lennon DATE: 13.05.82

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: 16m @ 1.76% WO3

DRILLING

DATE COMMENCED: 5-05-82 DATE TERMINATED:

DRILLER/CONTRACTOR: A.D.D. / L. Pankhurst

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/51

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 1.50	1.50	1.50	100
1.50 - 2.00	0.50	0.40	80
2.00 - 3.90	1.90	1.40	74
3.90 - 5.50	1.60	1.40	88
5.50 - 7.30	1.80	1.80	100
7.30 - 9.10	1.80	1.60	89
9.10 - 10.50	1.40	1.40	100
10.50 - 11.50	1.00	1.00	100
11.50 - 14.50	3.00	2.90	97
14.50 - 14.90	0.40	0.40	100
14.90 - 16.00	1.10	1.00	91
16.00 - 17.20	1.20	1.20	100
17.20 - 19.00	1.80	1.60	89
19.00 - 19.70	0.70	0.70	100
19.70 - 21.30	1.60	1.50	94
21.30 - 22.60	1.30	1.30	100

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D340/51

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 - 19.1m	gL(b)							
19.2 - 22.6m	L.V.							

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. D340/51

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
13903	0	1	1	1	0.45			
13904	1	2	1	1	0.42			
13905	2	3	1	1	11.2			
13906	3	4	1	1	0.51			
13907	4	5	1	1	0.80			
13908	5	6	1	1	0.82			
13909	6	7	1	1	0.37			
13910	7	8	1	1	2.10			
13911	8	9	1	1	0.37			
13912	9	10	1	1	1.05			
13913	10	11	1	1	1.50			
13914	11	12	1	1	0.83			
13915	12	13	1	1	3.90			
13916	13	14	1	1	6.00			
13917	14	15	1	1	5.2			
13918	15	16	1	1	3.00			
13919	16	17	1	1	0.20			
13920	17	18	1	1	0.15			
13921	18	19	1	1	0.28			
13922	19	20	1	1	0.16			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D340/51

0 - 19.1m	GARNET HORNFELS BANDED

Well banded unit of interbedded gh, ph, bh and ch. Mineralisation fairly good to 16m probably averaging 0.9%, beyond 16m it is probably about 0.4%.

Because of bedding planes there are many partings in the rock and core sticks are commonly 10-30 cm long.

Zone of broken core occur @ 0.3m, 11.3m, 16.3 - 17.3m.

Bedding is @	40^{o} to L.C.A. @	3 m
	55^{o}	7.5 m
	48^{o}	10 m
	45^{o}	16 m
	60^{o}	18 m

19.1 - 22.6m	LOWER VOLCANICS

Fine grained homogeneous dark green rock with small 1mm dark alteration spotting. Fairly competent ground 10-20 m sticks.

Joint planes have only moderate development of chlorite (slickenslides).

The top contact is quite broken but is probably not faulted.

E.O.H. 22.6m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D340/50

PLANNING

PROPOSER: R.E.S. Davies DEPTH:

LOCATION: W54 -260m Level

PURPOSE OF HOLE: Test footwall of Lower Wedge Orebody

PROPOSED CO-ORDS: 220 338 E 563 945 N

INCLINATION: -40°

BEARING: 102° °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 101°53' °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220341.9 E 563943.1 N

R.L. OF COLLAR: -263.35

INCLINATION OF HOLE: -39°

PICKED UP BY: B.L. DATE: 13.05.82

SUMMARY

LOGGED BY: R.E.S.D.

RESULTS: Hole abandoned at 5.7m

DRILLING

DATE COMMENCED: 6-05-82 DATE TERMINATED: 7-08-82

DRILLER/CONTRACTOR: L. Pankhurst/A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D340/50

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.90	2.90	2.50	86
2.90 - 3.60	0.70	0.60	86
3.60 - 3.90	0.30	0.30	100
3.90 - 5.70	1.80	1.65	92

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D340/50

0 - 5.7m

BANDED FOOTWALL BEDS

This fractured and broken unit consists mostly of gh for the first 1m, followed by ph to about 3.8m and the remainder is marble.

A little scheelite occurs at the start of the gh and rare scheelite occurs in the ph. The marble is barren.

The ground is badly broken throughout, 10-15cm core stick max.

The interval from 2.8 - 3.6m consists of badly broken ph in 1.5cm angular fragments with some clay matrix.

A lined cavities occur in the marble.

The unit is too disturbed to pick out bedding angles.