

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/27

PLANNING PROPOSER: R. E. S. Davies DEPTH: 60 m
LOCATION: R13 Pump station
PURPOSE OF HOLE: Test granite for Decline Bypass
PROPOSED CO-ORDS: 220 247 E 564 070 N
INCLINATION: -55
BEARING: 360 ° GRID ° MAG
TARGET: E N
DEPTH:
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: 358° 43' ° GRID ° MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220 245.90 E 564 074.11 N
R.L. OF COLLAR: -204.14
INCLINATION OF HOLE: -50° 48'
PICKED UP BY: R. Howman DATE: 3/6/81

SUMMARY LOGGED BY: R. E. S. Davies
RESULTS:

DRILLING DATE COMMENCED: 25/6/81 DATE TERMINATED: 31/6/81
DRILLER/CONTRACTOR: S. Batchelor/A,D,D.
CASING: SIZE:
DEPTH:
CORE: SIZE: 46TT
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 72 m
REASON FOR TERMINATION: In granite
CONDITION OF HOLE ON COMPLETION:
CASING:
CEMENTED:
BORE HOLE SURVEY: M/S
WATER:
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/27

Surveyed method: Multishot
 Final depth: 72.0 m
 Casing depth: 1.0 m

Depth surveyed to: 59.0 m
 Date surveyed: 1/7/81
 Surveyed by: C. O'Brien
 Checked by:

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.			
0.0	358.43 ^o	-	-	-50.48	0.00		
13.0	356.50	N13 ^o 30' W	-39.00	-51.00	10.06		
22.0	357.25	N12 ^o 45' W	-38.30	-51.50	17.06		
31.0	359.00	N11 ^o W	-38.45	-51.25	24.16		
40.0	358.00	N12 ^o W	-38.45	-51.25	31.16		
49.0	358.50	N11 ^o 30' W	-38.15	-51.75	38.16		
58.0	358.0	N12 ^o W	-38.00	-52.00	45.26		
59.0	359.0	N11 ^o W	-38.0	-52.0	45.96		
72.0	-	-	-	-	-		
EOH							

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 240/27

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.4	1.4	0.8	57
1.4 - 1.9	0.5	0.5	100
1.9 - 2.4	0.5	0.4	80
2.4 - 2.6	0.2	0.2	100
2.6 - 4.0	1.4	1.4	100
4.0 - 4.5	0.5	0.3	60
4.5 - 4.8	0.3	0.2	66
4.8 - 5.4	0.6	0.4	75
5.4 - 6.4	1.0	0.9	90
6.4 - 7.6	1.2	1.2	100
7.6 - 8.4	0.8	0.8	100
8.4 - 8.9	0.5	0.5	100
8.9 - 9.4	0.5	0.5	100
9.4 - 10.5	1.1	1.0	91
10.5 - 10.8	0.3	0.2	66
10.8 - 12.7	1.9	1.7	89
12.7 - 13.3	0.6	0.5	83
13.3 - 15.0	1.7	1.5	88
15.0 - 16.7	1.7	1.5	88
16.7 - 17.2	0.5	0.4	80
17.2 - 18.0	0.8	0.7	88
18.0 - 19.1	1.1	1.0	91
19.1 - 19.5	0.4	0.3	75
19.5 - 20.1	0.6	0.4	75
20.1 - 22.6	2.5	2.5	100
22.6 - 23.3	0.7	0.6	86
23.3 - 25.2	2.0	2.0	100
25.2 - 27.7	2.5	2.5	100
27.7 - 28.0	0.3	0.3	100
28.0 - 29.5	1.5	1.5	100
29.5 - 31.8	2.3	2.2	96
31.8 - 32.5	0.7	0.7	100
32.5 - 35.2	2.7	2.7	100
35.2 - 38.0	2.8	2.8	100
38.0 - 41.0	3.0	3.0	100
41.0 - 44.0	3.0	3.0	100
44.0 - 47.0	3.0	3.0	100
47.0 - 50.0	3.0	3.0	100
50.0 - 52.5	2.5	2.5	100
52.5 - 55.0	2.5	2.5	100
55.0 - 58.0	3.0	3.0	100
58.0 - 60.7	2.7	2.7	100
60.7 - 63.7	3.0	3.0	100
63.7 - 66.7	3.0	3.0	100
66.7 - 69.8	3.1	3.1	100
69.8 - 72.0	2.2	2.0	91
EOH 72.0 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/27

Summary

0.0 - 25.9 m	bph
25.9 - 31.1	bh
31.1 - 40.4	bph
40.4 - 61.3	Meta basalt
61.3 - 66.8	q
66.8 - 72.0	Granite

0.- - 25.9 m BIOTITE PYROXENE HORNFELS

A well fractured, well bedded unit of roughly equal biotite hornfels and pyroxene hornfels, parting mostly on bedding planes. Average core size 5 - 10 cm.

Some thin beds of grossular. In the last 5 m biotite hornfels > pyroxene hornfels and ground is slightly better.

Bedding is @ 40°	to LCA @ 5 m
"	60 10 m
"	60 17 m
"	45 23 m

25.9 - 31.1 BIOTITE HORNFELS

Black fine grained homogeneous biotite hornfels, fairly competent, average core size 10 - 20 cm.

Stratigraphic top and bottom contacts.

31.1 - 40.4 BIOTITE PYROXENE HORNFELS

Not such a regular interbedded biotite hornfels, pyroxene hornfels unit as the first, initially it is high in silica, appears almost quartzitic later it becomes a pyroxene hornfels dominant unit, in which the pyroxene hornfels is disturbed and contains significant sulphides.

Average core lengths is 15 - 30 cm.

Bedding is @ 45° to LCA @ 36 m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/27

40.4 - 61.3

META-BASALT

This appears to be a heavily altered (serpentised?) basic or ultra-basic intrusion).

It has a medium grain size (2 mm) and generally appear homogeneous.

At several places the core is badly decomposed to clay and rock flour possibly by faulting at 43 - 44 m, 45 - 45.5 m, 48 - 49 m, 53.5 - 54.5 m, 57 m, 60.5 - 61.3 m.

The bottom contact is brecciated, but the upper contact appears to have a 2 m chill zone.

Fractured surfaces have a soapy serpentine feel to them, and average core size is 10 - 30 m.

61.3 - 66.8

QUARTZITES

Hard, siliceous, pale grey, fine grained with some clino-humite infilling in locally brecciated occurs @ 65.6 m.

Core average 20 - 30 cm long.

66.8 - 72.0

GRANITE

Pink, medium grained rather fractured granite. Core averaging 15 - 20 cm long.

EOH 72.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/26

PLANNING PROPOSER: R. E. S. Davies DEPTH: 50 m
LOCATION: R13 Pump station
PURPOSE OF HOLE: Test granite contact
PROPOSED CO-ORDS: 220 247 E 564 070 N
INCLINATION: -65°
BEARING: 180° GRID MAG
TARGET: E N
DEPTH:
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: $181^{\circ} 22'$ GRID MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220 246.29 E 564 072.35 N
R.L. OF COLLAR: -204.18
INCLINATION OF HOLE: $-66^{\circ} 12'$
PICKED UP BY: R. Howman DATE: 7/7/81

SUMMARY LOGGED BY: R. E. S. Davies
RESULTS:

DRILLING DATE COMMENCED: 1/7/81 DATE TERMINATED: 8/7/81
DRILLER/CONTRACTOR: S. Batchelor/A.D.D.
CASING: SIZE:
DEPTH:
CORE: SIZE: 46TT
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 61 m
REASON FOR TERMINATION: Sufficient depth of meta-basalt.
CONDITION OF HOLE ON COMPLETION:
CASING:
CEMENTED:
BORE HOLE SURVEY: M/S
WATER:
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/26

Surveyed method: Multishot
 Final depth: 61.0 m
 Casing depth: 2.0 m

Depth surveyed to: 58.0 m
 Date surveyed: 8/7/81
 Surveyed by: C. O'Brien
 Checked by:

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.			
0.0	181.22°	-	-	-66.12	0.00		
10.0	180.00	S 10° E	-24.15	-65.75	9.10		
19.0	180.75	S 9° 15' E	-24.00	-66.00	17.30		
28.0	180.75	S 9° 15' E	-24.0	-66.00	25.60		
37.0	181.75	S 8° 15' E	-24.0	-66.00	33.80		
46.0	181.00	S 9° E	-24.0	-66.00	42.00		
55.0	184.0	S 6° E	-24.0	-66.0	50.20		
58.0	182.50	S 7° 30' E	-24.0	-66.00	53.0		
61.0	182.50	S 7° 30' E	-24.0	-66.00	55.70		
EOH							

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 240/26

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.5	1.5	0.8	53
1.5 - 1.8	0.3	0.2	66
1.8 - 2.0	0.2	0.7	50
2.0 - 2.5	0.5	0.3	60
2.5 - 5.0	2.5	2.3	92
5.0 - 5.7	0.7	0.5	71
5.7 - 6.1	0.4	0.2	50
6.1 - 6.7	0.6	0.5	83
6.7 - 7.6	0.9	0.9	100
7.6 - 8.5	0.9	0.9	100
8.5 - 9.3	0.8	0.8	100
9.3 - 10.0	0.7	0.7	100
10.0 - 10.8	0.8	0.8	100
10.8 - 12.1	1.3	1.2	92
12.1 - 13.0	0.9	0.8	89
13.0 - 13.7	0.7	0.6	86
13.7 - 14.1	0.4	0.4	100
14.1 - 14.7	0.6	0.6	100
14.7 - 15.4	0.7	0.7	100
15.4 - 16.5	1.1	0.8	73
16.5 - 18.0	1.5	1.5	100
18.0 - 19.0	1.0	1.0	100
19.0 - 21.8	2.8	2.8	100
21.8 - 23.5	1.7	1.7	100
23.5 - 25.0	1.5	1.5	100
25.0 - 26.5	1.5	1.5	100
26.5 - 28.2	1.7	1.7	100
28.2 - 30.0	1.8	1.8	100
30.0 - 31.5	1.5	1.5	100
31.5 - 33.0	1.5	1.5	100
33.0 - 34.7	1.7	1.7	100
34.7 - 36.2	1.5	1.5	100
36.2 - 39.2	3.0	3.0	100
39.2 - 41.7	2.5	2.5	100
41.7 - 43.4	1.7	1.7	100
43.4 - 46.2	2.8	2.8	100
46.2 - 47.8	1.6	1.6	100
47.8 - 48.3	0.5	0.4	80
48.3 - 50.0	1.7	1.7	100
50.0 - 53.0	3.0	3.0	100
53.0 - 56.0	3.0	3.0	100
56.0 - 59.0	3.0	3.0	100
59.0 - 61.0	2.0	2.0	100
EOH 61.0 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/26

Summary

0.0 - 37.0 m Bph
37.0 - 51.0 Bh
51.0 - 61.0 Mb

0.0 - 37.0 m BIOTITE PYROXENE HORNFELS

Typical well bedded biotite hornfels and pyroxene hornfels initially (< to 20 m) highly fractured, mostly on bedding planes, thin bands of grossular garnet are present and occasional scheelite is associated with them.

Bedding is @	33°	to LCA @	3.0 m
"	25		10.0 m
"	40		17.0 m
"	30		22.0 m
"	40		33.0 m

37.0 - 51.0 BIOTITE HORNFELS

Fine grained dark homogeneous competent biotite hornfels which is extensively intruded by aplites from 43.5 - 50.0 m only about 40 cm of this interval is biotite hornfels.

Bedding is @ 30° to LCA @ 40.0 m

51.0 - 61.0 META-BASALT

Again this has a vague diffuse contact suggestive of being stratigraphic, the initial 2 m appear to be pyroxene rich.

The remainder is a steel grey fine to medium grained fairly fractured meta basalt. The last 1 m is particularly weak and is easily broken by hand.

EOH 61.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/25

PLANNING PROPOSER: R. E. S. Davies DEPTH: 60 m
LOCATION: R13 Pump station
PURPOSE OF HOLE: Test granite contact
PROPOSED CO-ORDS: 220 247 E 564 070 N
INCLINATION: -90°
BEARING: 0° GRID MAG
TARGET: E N
DEPTH:
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: 220° GRID MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220 245.92 E 564 073.03 N
R.L. OF COLLAR: 204.11
INCLINATION OF HOLE: $89^{\circ} 10'$
PICKED UP BY: R. Howman DATE: 23/6/81

SUMMARY LOGGED BY: R. E. S. Davies
RESULTS:

DRILLING DATE COMMENCED: 18/6/81 DATE TERMINATED: 25/6/81
DRILLER/CONTRACTOR: S. Batchelor/A.D.D.
CASING: SIZE:
DEPTH:
CORE: SIZE: 46TT
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 50 m
REASON FOR TERMINATION: Abandoned in poor ground
CONDITION OF HOLE ON COMPLETION:
CASING:
CEMENTED:
BORE HOLE SURVEY: Hole collapsed and could not be surveyed.
WATER:
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 240/25

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.07	1.07	0.80	75
1.07 - 2.2	1.13	0.6	53
2.2 - 2.6	0.4	0.3	75
2.6 - 3.2	0.6	0.5	83
3.2 - 3.8	0.6	0.6	100
3.8 - 4.2	0.4	0.3	75
4.2 - 4.6	0.4	0.4	100
4.6 - 4.9	0.3	0.1	33
4.9 - 5.3	0.4	0.4	100
5.3 - 6.0	0.7	0.7	100
6.0 - 6.8	0.8	0.8	100
6.8 - 8.0	1.2	1.2	100
8.0 - 9.5	1.5	1.5	100
9.5 - 9.8	0.3	0.3	100
9.8 - 11.2	1.4	1.4	100
11.2 - 12.7	1.5	.15	100
12.7 - 13.5	0.8	0.8	100
13.5 - 15.0	1.5	1.5	100
15.0 - 15.5	0.5	0.5	100
15.5 - 16.8	1.3	1.3	100
16.8 - 18.5	1.7	1.7	100
18.5 - 20.0	1.5	1.5	100
20.0 - 22.0	2.0	2.0	100
22.0 - 23.5	1.5	1.5	100
23.5 - 26.5	3.0	3.0	100
26.5 - 28.5	2.0	2.0	100
28.5 - 31.0	2.5	2.5	100
31.0 - 34.0	3.0	3.0	100
34.0 - 37.0	3.0	3.0	100
37.0 - 39.1	2.1	2.1	100
39.1 - 41.0	1.9	1.9	100
41.0 - 43.0	2.0	2.0	100
43.0 - 44.0	1.0	1.0	100
44.0 - 46.0	2.0	2.0	100
46.0 - 45.4	0.4	0.4	100
45.4 - 48.2	1.8	1.8	100
48.2 - 50.0	1.8	1.8	100
EOH 50.0 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/25

Summary

0.0 - 37.6 m Biotite Pyroxene Hornfels
37.6 - 50.0 m Meta-Basalt

0.0 - 37.5 m

BIOTITE PYROXENE HORNFELS

Typical well bedded biotite pyroxene hornfels, partings are common on bedding planes and other fractures giving sticks of 5 - 15 length. The unit has biotite hornfels pyroxene hornfels, pyroxene hornfels beds generally 1 - 5 cm thick.

No pyroxene hornfels is present from 25.5 - 30.5 m and this area of biotite hornfels is much more competent.

The last 3.5 m of the unit is mostly a rather disturbed but fairly competent pyroxene hornfels with a 20 cm marble unit @ 35.4 m. Some scheelite is associated with the pyroxene hornfels.

Elsewhere in the unit rare bands of grossular are present with occasional flecks of scheelite,

The pyroxene hornfels and marble unit may represent the base of the biotite pyroxene hornfels unit and in fact the last 20 m of the unit above the intrusion is sulphide rich quartzite, possibly the top of the basal stratigraphic quartzites.

Bedding is @ 55°	to LCA @ 5 m
"	50 12 m
"	60 17 m
"	60 25 m
"	60 31 m
"	60 37 m

37.6 - 50.0 m

META-BASALT

This is dark grey rock containing small (1 mm) mafic minerals in a fine grained grey matrix. It is commonly cut by joints which have a soapy? serpentinite lining.

The unit has a sharp intrusive contact with the previous unit; no chill margins, or baked zone can be identified.

Locally the core is very fractured, from 42 - 43 m the core is puggy, decomposing to green pyroxene hornfels and soft clays.

Another 10 cm clay zone occurs @ 44 m.. From 46.4 - 48.2 m the core is a pale green pyroxene hornfels and actinolite hornfels, badly altered and broken into fragments of about 2 cm diameter.

Where the meta-basalt is unaltered, core stick of 5 - 15 cm length were recovered.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D240/24

PLANNING PROPOSER: R. E. S. Davies DEPTH: 80 m
LOCATION: R13 Pump Station
PURPOSE OF HOLE: Test Granite Contact
PROPOSED CO-ORDS: 220 247 E 564 070 N
INCLINATION: 70°
BEARING: 360° °GRID °MAG
TARGET: E N
DEPTH:
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: 360° °GRID °MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220 246.02 E 564 073.42 N
R.L. OF COLLAR: 203.23
INCLINATION OF HOLE: -70°
PICKED UP BY: R. Howman DATE: 23/6/81
Hole collapsed before pick up

SUMMARY LOGGED BY: R. E. S. Davies
RESULTS:

DRILLING DATE COMMENCED: 13/6/81 DATE TERMINATED: 18/6/81
DRILLER/CONTRACTOR: S. Batchelor/A.D.D.
CASING: SIZE:
DEPTH:
CORE: SIZE: 46TT
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 47 m
REASON FOR TERMINATION: Abandoned due to Swelling clays
CONDITION OF HOLE ON COMPLETION:
CASING:
CEMENTED:
BORE HOLE SURVEY: No survey due to hole collapse
WATER:
COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 240/24

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.1	2.1	1.7	81
2.1 - 2.9	0.8	0.7	88
2.9 - 3.8	0.9	0.9	100
3.8 - 4.6	0.8	0.8	100
4.6 - 5.1	0.5	0.4	80
5.1 - 6.1	1.0	1.0	100
6.1 - 6.7	0.6	0.6	100
6.7 - 8.7	1.0	1.0	100
8.7 - 8.1	0.4	0.3	75
8.1 - 8.7	0.6	0.6	100
8.7 - 9.3	0.6	0.5	83
9.3 - 9.6	0.3	0.3	100
9.6 - 10.1	0.5	0.4	80
10.1 - 10.6	0.5	0.4	80
10.6 - 11.8	1.2	1.2	100
11.8 - 12.6	0.8	0.8	100
12.6 - 14.3	1.7	1.6	94
14.3 - 14.8	0.5	0.5	100
14.8 - 16.0	1.2	1.2	100
16.0 - 17.2	1.2	1.2	100
17.2 - 18.2	1.0	1.0	100
18.2 - 19.6	1.4	1.1	79
19.6 - 20.1	0.5	0.5	100
20.1 - 20.5	0.4	0.4	100
20.5 - 20.7	0.2	0.2	100
20.7 - 21.2	0.5	0.5	100
21.2 - 22.3	1.1	1.0	91
22.3 - 23.3	1.0	1.0	100
23.3 - 24.0	0.7	0.7	100
24.0 - 24.6	0.6	0.5	83
24.6 - 26.4	1.8	1.8	100
26.4 - 29.4	3.0	3.0	100
29.4 - 31.0	1.6	1.5	94
31.0 - 32.4	1.4	1.3	
32.4 - 35.1	2.7	2.7	100
35.1 - 36.5	1.4	1.4	100
36.5 - 36.9	0.4	0.3	75
36.9 - 37.2	0.3	0.2	66
37.2 - 39.5	2.3	2.2	
39.5 - 40.5	1.0	1.0	100
40.5 - 42.5	2.0	2.0	100
42.5 - 43.2	0.7	0.2	100
43.2 - 45.0	1.8	1.7	94
45.0 - 46.4	1.4	2.0	143
46.4 - 47.0	0.6	0.5	83
EOH 47.0 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/24

Summary

0.0 - 24.9 m bph
24.9 - 29.9 LV
29.9 - 32.5 bph
32.5 - 47.0 Metabasalt

0.0 24.9 m

BIOTITE PYROXENE HORNFELS

Well bedded biotite hornfels and pyroxene hornfels with biotite hornfels, pyroxene hornfels, ground is fairly poor, due to partings on bedding planes and fractured core, core stick commonly 5 - 15 cm long.

Small beds of mineralised garnet hornfels @ 17.3 m, 18.5 m, 19.6 m, 20.5 m.

Very broken and clayey ground @ 21.8 - 22.4 m.

Bedding is @ 50°	to LCA @ 3 m
"	50 10 m
"	55 17 m
"	55 24 m

The last 3 m of the unit is entirely biotite hornfels.

24.9 - 29.9

BIOTITE HORNFELS

Massive fine grained homogeneous rock which is fairly competent, core sticks typically 20 - 30 cm long.

29.9 - 32.5

BIOTITE PYROXENE HORNFELS

Well bedded biotite pyroxene hornfels with garnet hornfels units @ 30 m, 30.6 - 31 m. Biotite hornfels fragments @ 31 m may indicate faulting.

32.5 - 47.0

?META-BASALT

Essentially a dark, heavy igneous rock with a medium - fine grain size. It has many partings which are all coated in a greasy material probably serpentinite.

The rock is fairly well broken up but beyond 43 m deteriorates to pugy clay/sand weathered ?fault material with fragments of the host rock in it. A 20 m quartzite vein occurs @ 41.7 m.

The pugy material is a swelling clay and as the hole was caving, could not be cemented and was abandoned.

EOH 47.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/23

PLANNING PROPOSER: D. Nag DEPTH: 20 m
LOCATION: Lower Pit Stope S62
PURPOSE OF HOLE: Test Swan Fault
PROPOSED CO-ORDS: 220248° E 563928° N
INCLINATION: 0°
BEARING: 120° °GRID °MAG
TARGET: E N
DEPTH:
CHECKED BY: S. G. Brown DATE: 2/6/80

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: 120°59' °GRID °MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220 247.1 E 563928.5 N
R.L. OF COLLAR: -220.1
INCLINATION OF HOLE: +1° 57'
PICKED UP BY: R. Howman DATE: 9/6/80

SUMMARY LOGGED BY: R. E. Sandell Davies
RESULTS:

DRILLING DATE COMMENCED: 6/6/80 DATE TERMINATED: 7/6/80
DRILLER/CONTRACTOR: Joe Penna/K.I.S.
CASING: SIZE:
DEPTH:
CORE: SIZE: BX TT
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 20 m
REASON FOR TERMINATION: In Biotite Hornfels
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. D 240/1~~8~~ 23

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.8 m	2.8	2.5	89
2.8 - 5.9	3.1	3.1	100
5.9 - 8.9	3.0	3.0	100
8.9 - 11.9	3.0	3.0	100
11.9 - 14.9	3.0	3.0	100
14.9 - 17.9	3.0	3.0	100
17.9 - 20.0	2.1	2.1	100
EOH 20.0 m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/~~18~~ 35

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC- TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T./ L. A. Q. C.)	% CORE RECO- VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 1.9 m	pgh	> 20		chl			5	
1.9 - 20.0	bh	1-5		cc/chl			81	

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/16 23

0.0 - 1.9 m FRACTURED PYROXENE GARNET HORNFELS

Fractured core, mostly 2 - 4 cm in size of biotite hornfels/
pyroxene hornfels with small pods (1 cm diam) of grossularite
garnet. No scheelite present.

Fracturing of first 1 m probably due to blasting. The remaining
0.9 m has virtually no pods but shows slickenslides on broken
surfaces.

Pyrrhotite is present in the rock.

1.9 - 20.0 BIOTITE HORNFELS

Black fine grained homogeneous biotite hornfels.

Thin aplites are present at 6.13 - 6.22 m and 18.72 - 18.76 m.

Some pyrrhotite is present in the rock.

The rock is disturbed and locally fractured for the first 1.5 m,
but slickenslides are not properly developed. Fracturing occurs
at 2.4 - 2.6 m, 3.3 - 3.4 m and 3.6 - 3.7 m.

* Bedding is @ 36° to LCA @ 11.5 m
 46° 15.9 m

Possible bedding appears subparallel to LCA at 5-6 m

EOH 20.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/22E

PLANNING PROPOSER: S. G. Brown DEPTH: 15 m
LOCATION: O10 Drive face
PURPOSE OF HOLE: To locate M/M
PROPOSED CO-ORDS: 220236 E 563989 N
INCLINATION: 0°
BEARING: 225° °GRID °MAG
TARGET: E N
DEPTH: 15 m
CHECKED BY: S. G. Brown DATE: 16/7/79

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: 223° 17' °GRID °MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220236.0 E 563989.1 N
R.L. OF COLLAR: -197.2
INCLINATION OF HOLE: -00° 23'
PICKED UP BY: R. Howman DATE: 20/7/79

SUMMARY LOGGED BY: S. Grieve Brown
RESULTS: Intersected marble marker at 7.16 m
no samples taken.

DRILLING DATE COMMENCED: DATE TERMINATED:
DRILLER/CONTRACTOR:
CASING: SIZE:
DEPTH:
CORE: SIZE:
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 15.0 m
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. D 240/19E

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.35	2.35	1.34	57
2.35 - 5.30	2.95	2.96	100
5.30 - 8.30	3.00	2.78	93
8.30 - 11.30	3.00	2.97	99
11.30 - 14.30	3.00	2.91	97
14.30 - 15.00	0.70	0.57	91
EOH 15.00 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/22E

0.00 - 0.77 m BIOTITE HORNFELS

A fine grained black purple biotite hornfels with minor amounts of pyroxene hornfels present in this unit.

The core is rather broken and slickensides are present on some planes.

0.77 - 1.96 FAULT ZONE?

Only .20 m recovered here apparently. The core is crushed garnet hornfels containing ore grade scheelite.

1.96 - 7.16 GARNET SKARN

Well mineralised upper C lens skarn, initially showing some fracturing over the first 0.40 m but reasonably solid thereafter. A possible major fracture may occur at 5.30 m where the core is crumbly over about 0.05 m.

The last 0.25 m of this core tends to grade into a garnet pyroxene.

7.16 - 12.93 BANDED BIOTITE PYROXENE GARNET HORNFELS

A slightly mixed up unit consisting of biotite hornfels and pyroxene hornfels which contains lesser amounts of garnet. Mineralisation is associated with the garnet rich areas.

Bedding 40° LCA at 10.70 m
35° LCA AT 11.35 m

12.93 - 14.17 MARBLE MARKER

Barren unreplaced unmineralised marble marker, grey in colour.

14.17 - 15.00 GARNET PYROXENE HORNFELS

Mineralised garnet pyroxene hornfels, lower C lens. Mineralisation here is fairly high grade.

EOH 15.00 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/21E

PLANNING PROPOSER: R. E. Sandell Davies DEPTH: 15 m
LOCATION: 010
PURPOSE OF HOLE: Define Marble Marker/Upper C Lens contact
PROPOSED CO-ORDS: 220243 E 563991 N
INCLINATION: -30°
BEARING: 225 $^{\circ}$ GRID $^{\circ}$ MAG
TARGET: E N
DEPTH:
CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: $224^{\circ} 41'$ $^{\circ}$ GRID $^{\circ}$ MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220236.3 E 563989.5 N
R.L. OF COLLAR: -198.0
INCLINATION OF HOLE: $-28^{\circ} 43'$
PICKED UP BY: R. Howman DATE: 10/7/79

SUMMARY LOGGED BY: R. E. Sandell Davies
RESULTS: 15 m Lower C Lens

DRILLING DATE COMMENCED: DATE TERMINATED:
DRILLER/CONTRACTOR:
CASING: SIZE:
DEPTH:
CORE: SIZE:
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 15 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. D240/21E

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.7	2.7	1.5	56
2.7 - 4.3	2.6	1.5	58
4.3 - 5.0	0.7	0.3	43
5.0 - 6.5	1.5	1.3	87
6.5 - 9.0	2.5	2.1	84
9.0 - 12.0	3.0	3.0	100
12.0 - 13.3	1.3	0.8	62
13.3 - 15.0	1.7	1.7	100
EOH 15.0 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D240/21E

0.0 15.0 m LOWER C LENS

The unit is very broken and fractured for the first 9.0 m and from 11.8 - 13.3 m, Suggesting a close proximity to Fault Zone(s).

Lithologically the unit is mineralised garnet. Skarn, except where unreplaced marble occurs e.g. at 5.0 - 6.0 m and pyroxene hornfels interbeds.

Bedding is @	44°	to LCA @	5.0 m
	60°		7.2 m
	0°		9.0 m
	30°		13.1 m

EOH 15.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/19

PLANNING PROPOSER: G, Brown DEPTH: 40 m
LOCATION: S40 Lower Pit (1st Lift)
PURPOSE OF HOLE: Test C Lens in Lower Central Area
PROPOSED CO-ORDS: 220245 E 563975 N
INCLINATION: -70°
BEARING: 360° GRID MAG
TARGET: E N
DEPTH:
CHECKED BY: T. Potter DATE:

SURVEY SURVEY CO-ORDS: E N
SURVEYED BEARING: $0^{\circ} 29'$ GRID MAG
SURVEYED IN BY: DATE:
ACTUAL CO-ORDS: 220245.29 E 563975.67 N
R.L. OF COLLAR: R-225.0
INCLINATION OF HOLE: $-69^{\circ} 27'$
PICKED UP BY: R. Howman DATE: 27/11/79

SUMMARY LOGGED BY: T. Potter
RESULTS: 7 - 16 m 9 m @ 1.78%, 0.04%

DRILLING DATE COMMENCED: DATE TERMINATED:
DRILLER/CONTRACTOR:
CASING: SIZE:
DEPTH:
CORE: SIZE:
DEPTH:
WEDGE PLACED: DEPTH: PROPOSER:
EXTENSION:
FINAL DEPTH: 40.0 m
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. D 240/19

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.10	3.1	3.1	100
3.10 - 6.00	2.9	2.9	100
6.00 - 7.40	1.4	1.4	100
7.40 - 8.30	0.9	0.9	100
8.30 - 9.10	0.8	0.8	100
9.01 - 11.20	2.1	2.1	100
11.20 - 12.30	1.1	1.1	100
12.30 - 13.00	0.7	0.7	100
13.00 - 15.40	2.4	2.4	100
15.40 - 17.00	1.6	1.6	100
17.00 - 18.70	1.7	1.7	100
18.70 - 19.80	1.1	1.1	100
19.80 - 20.80	1.0	1.0	100
20.80 - 22.70	1.9	1.9	100
22.70 - 24.50	1.8	1.8	100
24.50 - 26.20	1.7	1.7	100
26.20 - 27.90	1.7	1.7	100
27.40 - 29.40	1.5	1.5	100
29.40 - 31.10	0.5	0.5	100
31.10 - 32.30	1.2	1.2	100
32.30 - 33.10	0.8	0.8	100
33.10 - 35.10	2.0	1.8	90
35.10 - 37.00	1.9	1.9	100
37.00 - 38.80	1.1	1.1	100
38.80 - 40.00	1.2	1.2	100

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/19

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC- TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W. R. T/ L. A. Q. C.)	% CORE RECO- VERY	R. Q. D.	REMARKS (WEATHERING)
0.0 - 8.7 m	pgh						27	
8.7 - 14.36	U/C						63	
14.36 - 15.24	M/M						81	
15.24 - 16.00	L/C						100	
16.00 - 35.85	bfb						58	
35.85 - 40.0	Low Vols.						50	

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 240/19

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO ₃	Mo		
D 11679	6	7	1.0	1.0	0.24	0.01		
80	6	7	"	"	0.46	0.02		
81	8	9	"	"	1.17	0.03		
82	9	10	"	"	2.10	0.04		
83	10	11	"	"	1.67	0.03		
84	11	12	"	"	2.04	0.02		
85	12	13	"	"	3.14	0.06		
86	13	14	"	"	4.14	0.09		
87	14	15	"	"	0.28	0.02		
88	15	16	"	"	1.10	0.04		
89	16	17	"	"	0.01	0.02		
90	17	18	"	"	0.01	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/19

- 0.0 - 8.70 m PYROXENE GARNET HORNFELS
Calcite pods small and not very distinct. Unit lightly broken with major shearing 7.20 - 7.40 m and minor shearing 8.10 - 8.30 m.
Both at 20 - 30° to C.A.
Sparse coarse grained scheelite - not grade
- 8.70 - 14.36 UPPER C LENS
Massive andradite skarn fine to medium grained 8.8 - 8.9 m 70% quartz - 30% andradite, 13.0 - 13.7 m 60% quartzite with andradite and minor pyroxene, Quartzite occurs as infusions and not veins high grade material with both strong fine grain disseminated and patches of coarse grained scheelite
- 14.36 - 15.24 MARBLE MARKER??
Unit of pyroxene bands and biotite bands showing weak to moderate bedding. No calcite only a 25 mm unit of grossularite. at 14.92 m
Bedding 35 to 60° to C.A
No tectonics
No mineralisation
- 15.24 - 16.00 LOWER C LENS
Garnet pyroxene hornfels with very weak bedding at 90° to C.A.
Garnet is andradite and grossularite. Mineralization as for Upper C Lens
- 16.00 - 35.85 BANDED FOOTWALL BEDS
Typical banded footwall units with pyroxene-grossularite bands marking about 40-50% of total. Very minor andradite,
16.80 - 18.30 m Very fine grained aplite with vague contacts to biotites. Unit is microcracked with a possible minor shear at 17.3 m
18.64 - 18.96 Aplite of coarser grained than above,
31.78 - 32.47 Medium grained aplite bedding consistantly at 60° to C.A,
19.60 - 19.80 Broken core with minor pug,
31.00 - 31.10 Minor broken core
34.86 - 35.1 Major fault zone strongly broken core with pug surrounding ground showing very few microcracks at 45°. Contains 6 2cm bands of mineralisation, Powdery scheelite occurs in a zone along a minor annealed fault at 20.25 m Fault at 20° to C.A,
- 35.85 - 40.00 LOWER VOLCANICS
Dark grey uniform rock spotted with amphibole, Top contact undisturbed and diffused.
EOH 40,0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 240/18

PLANNING PROPOSER: G. Brown DEPTH: 40 m

LOCATION: S40 Lower Pit (1st Lift)

PURPOSE OF HOLE: Test C Lens in Lower Central Area

PROPOSED CO-ORDS: 220245 E 563975 N

INCLINATION: -75°

BEARING: 180° ° GRID ° MAG

TARGET: E N

DEPTH:

CHECKED BY: T. Potter DATE:

SURVEY SURVEY CO-ORDS: E N

SURVEYED BEARING: $185^{\circ} 51'$ ° GRID ° MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220245,63 E 563975,20 N

R.L. OF COLLAR: R-225,0

INCLINATION OF HOLE: $\sim 73^{\circ} 31'$

PICKED UP BY: R. Howman DATE: 27/11/79

SUMMARY LOGGED BY: T. Potter

RESULTS: 3 - 21 m 18 m @ 1,86% 0,04% Low Central

DRILLING DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 40,0 m

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. D 240/18

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.96 m			No core
2.96 - 3.40	0.34	0.34	100
3.40 - 4.70	1.3	1.3	100
4.70 - 5.40	0.7	0.7	100
5.40 - 7.70	2.3	2.3	100
7.70 - 8.70	0.8	1.0	80
8.70 - 9.80	1.1	1.1	100
9.80 - 10.80	0.67	1.0	67
10.80 - 12.50	0.67	2.7	24.8
12.50 - 14.30	1.14	1.8	63.3
14.30 - 16.00	0.87	1.7	51.2
16.00 - 17.30	1.17	1.3	90
17.30 - 20.00	2.7	2.7	100
20.00 - 21.00	1.0	1.0	100
21.00 - 22.90	1.22	1.4	87.1
22.40 - 23.80	1.4	1.4	100
23.80 - 24.80	1.0	1.0	100
24.80 - 26.00	1.2	1.2	100
26.00 - 26.60	0.6	0.6	100
26.60 - 24.40	2.8	2.8	100
29.40 - 30.30	0.9	0.9	100
30.30 - 33.20	2.9	2.9	100
33.20 - 35.00	1.8	1.8	100
35.00 - 36.90	1.9	1.9	100
36.90 - 38.60	2.0	2.0	100
38.60 - 40.00	1.4	1.4	100

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/18

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC- TURES /m	JOINT ANGLE (WRT/ LAOC)	JOINT FILLING	BEDDING ANGLE (W R T/ L A O C)	% CORE RECO- VERY	R Q D	REMARKS (WEATHERING)
0.0 - 7.7	pgh						9.7	
7.7 - 16.9	gh						13.7	
16.9 - 20.45	pgh						76.1	
20.45 - 21.0	ch						67.3	
21.0 - 29.8	pbh						81.1	
29.8 - 31.6	bh/ph						61.1	
31.6 - 33.3	aplite						48.8	
33.3 - 34.1	bh						41.3	
34.1 - 35.1	aplite						75	
35.1 - 40.0	bfb						77.6	

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 240/18

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO ₃	Mo		
D 11586	3	4	1.0	1.0	1.13	0.02		
87	4	5	"	"	0.44	0.01		
88	5	6	"	"	0.39	0.01		
89	6	7	"	"	1.14	0.05		
90	7	8	"	"	3.90	0.08		
91	8	9	"	"	1.97	0.02		
92	9	10	"	"	1.97	0.02		
93	10	11	"	"	1.74	0.02		
94	11	12	"	"			No core	
95	12	13	"	"	1.51	0.02		
96	13	14	"	"	5.7	0.09	Core loss	
97	14	15	"	"	3.90	0.06	Core loss	
98	15	16	"	"	1.44	0.02	Core loss	
99	16	17	"	"	0.40	0.02		
11600	17	18	"	"	0.83	0.05		
01	18	19	"	"	4.06	0.15		
02	19	20	"	"	0.87	0.02		
03	20	21	"	"	0.47	0.02		
04	21	22	"	"	0.17	0.01		
05	22	23	"	"	0.29	0.01		
06	23	24	"	"	0.25	0.01		
07	24	25	"	"	0.20	0.01		
08	25	26	"	"	0.27	0.01		
09	26	27	"	"	0.10	0.01		
10	27	28	"	"	0.24	0.01		
11	28	29	"	"	0.21	0.01		
12	29	30	"	"	0.01	0.01		

SPECIFIC GRAVITY

Determined by:

Depth (metres):

Rock Type:

S.G.:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/18

- 0.0 - 7.70 m GARNET PYROXENE HORNFELS
With minor biotite hornfels. No visible bedding. Infused in several places with quartz, the strongest being 7.40 - 7.65 m. Weak coarse grained mineralised 0.0 - 6.5 m. Moderate coarse grained mineralised 6.5 - 7.7 m. Core moderately broken with possible fault at 6.6 m
- 7.70 - 16.9 GARNET HORNFELS
Massive, fine to medium grained quartzite infusions 12.70 - 13.2, 16.2 - 16.50, 12.70 - 12.72 m. Quartz - garnet hornfels - 10% pyrite moderately mineralisation. Core is crumbled 13.8 m 14.3, 15.7 showing significant core loss.
- 16.9 - 20.45 GARNET PYROXENE HORNFELS
Very fine grained with calcite - quartz zones and infusions weakly disturbed and sheared whole zone is rich in sulphides mainly pyrite with minor chalcopyrite and pyrrhotite. Weak mineralisation with some strong areas.
- 20.45 - 21.0 MARBLE
Clear barren and bedding at 50°.
- 21.0 - 29.8 PYROXENE BIOTITE HORNFELS
Moderate bedding 23.0 m 40° to LCA
27.9 m 50° to LCA
Weakly mineralised as coarse grained and fine grained 21.0 - 26.5 barren calcite at 26.7 - 27.1, 27.7 - 27.9. Pug 21.1 - 21.15 m.
- 29.8 - 31.6 BIOTITE HORNFELS/PYROXENE HORNFELS
Bedded
30.6 - 31.6 Fault zone showing cemented breccia, strong shearing about 45° to LCA. Contains some carbonate veining.
- 31.6 - 33.3 APLITE
Fine grained pink very little biotite. Carbonate veining in first 0.5 m both contacts diffused.
- 33.3 - 34.1 BIOTITE HORNFELS
Sheared at about 45° LCA
Lower half containing carbonate veining.
- 34.1 - 35.1 APLITE
As above.
Top contact diffused, bottom contact 70°

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 240/18

35.1 - 40.0 m BANDED FOOTWALL BEDS

Biotite hornfels with bands of pyroxene with grossularite, no mineralisation, Calcite veining and zones present. Moderate shear 36.8 rest of core solid.

EOH 40.0 m

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/17

Survey method: Multishot Camera
Final depth: 76.0 m
Casing depth: 1m

Depth surveyed to: 76.0 m
Date surveyed: 25-5-78
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
16	006	356	48.75	-41.25	10.55	12.0	0.84
46	004	354	52.25	-37.75	28.92	35.59	3.32
76	004	354	52.75	-37.25	47.08	59.34	5.82
EOH 76 m							

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No.

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.7	2.7	2.7	100
2.7 - 5.0	2.3	2.3	100
5.0 - 8.0	3.0	3.0	100
8.0 - 11.0	3.0	3.0	100
11.0 - 14.0	3.0	3.0	100
14.0 - 16.60	2.6	2.6	100
16.6 - 18.40	1.8	1.8	100
18.4 - 21.4	3.0	3.0	100
21.4 - 24.4	3.0	3.0	100
24.4 - 26.0	1.6	1.6	100
26.0 - 27.8	1.8	1.8	100
27.8 - 29.0	1.2	1.2	100
29.0 - 30.0	1.0	1.0	100
30.0 - 33.0	3.0	3.0	100
33.0 - 36.0	3.0	3.0	100
36.0 - 37.6	1.6	1.5	94
37.6 - 37.7	0.1	0.1	100 Broken
37.7 - 38.6	0.9	1.0	111
38.6 - 41.6	3.0	3.0	100
41.6 - 41.9	0.3	0.3	100
41.9 - 42.5	0.6	0.6	100
42.5 - 43.5	1.0	1.0	100
43.5 - 45.1	1.6	1.6	100
45.1 - 46.6	1.5	1.5	100
46.6 - 47.5	0.9	1.0	111
47.5 - 48.7	1.2	1.2	100
48.7 - 51.7	3.0	3.0	100
51.7 - 54.7	3.0	3.0	100
54.7 - 57.7	3.0	3.0	100
57.7 - 59.0	2.3	2.3	100
59.0 - 62.0	3.0	3.0	100
62.0 - 65.0	3.0	3.0	100
65.0 - 68.0	3.0	3.0	100
68.0 - 71.0	3.0	3.0	100
71.0 - 74.0	3.0	3.0	100
74.0 - 76.0	3.0	3.0	100
EOH 76.0 m			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/17

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO ₃	Mo		
D 7716 17	0	1	1.0	1.0	0.52	0.03	2m @ 0.46 WO ₃	↓ B lens
	1	2	"	"	0.34	0.02		
D 7718 19	12	13	"	"	0.34	0.02		
	13	14	"	"	<0.01	<0.01		
D 7916 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35	49	50	"	"	0.28	0.01	13 m @ 0.67% WO ₃	↓ LOWER Lens ↑
	50	51	"	"	0.84	0.02		
	51	52	"	"	1.26	0.03		
	52	53	"	"	0.56	0.02		
	53	54	"	"	0.61	0.02		
	54	55	"	"	0.39	0.01		
	55	56	"	"	1.73	0.07		
	56	57	"	"	0.28	0.02		
	57	58	"	"	0.59	0.03		
	58	59	"	"	0.75	0.02		
	59	60	"	"	0.76	0.03		
	60	61	"	"	0.30	0.02		
	61	62	"	"	0.4	0.03		
	62	63	"	"	0.07	0.01		
	63	64	"	"	<0.01	0.01		
	64	65	"	"	0.7	0.04		
	65	66	"	"	0.02	0.01		
66	67	"	"	0.48	0.02			
67	68	"	"	0.05	0.01			
68	69	"	"	0.29	0.02			

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 240/17

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 - 13.2	B lens	4-5		chl, clay, carb		100	81	
13.2 - 48.6	Bh	7		chl, clay, carb sulph.		99	65	
48.6 - 61.6	Gh banded	12		clay, carb, chl		100	47	
61.6 - 68.85	Bfb	8		chl, carb		100	43	
68.85- 76.0	Lv	6(-15)		chl, cal, qtz.		100	64	
EOH 76.0 m.								

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/17

0.0 - 13.20 m

B LENS

Typical B lens divisible into :-

0.0 - 1.5 m. Pyroxene hornfels - greenish coloured ph with minor grossular garnet and disseminated scheelite. The core is slightly fractured.

1.5 - 12.45 m. Marble - massive grey, barren marble with numerous clay / carbonate filled fractures. No scheelite mineralization present.

From 10.0 - 10.7 m, a possible greenish - brownish tuffite unit is present.

12.47 - 13.20 m. Pyroxene Hornfels - greenish pyroxene hornfels with minor grossular and disseminated scheelite.

13.20 - 48.60 m

BIOTITE HORNFELS

Dark grey to brown coloured fine grained biotite hornfels with numerous fault - broken ground zones throughout.

Possible faults zones occur from :-

- 25.5 m (shearing, breccia and minor carbonate)
- around 28.75 m (sheared chloritic material, slickensides and carbonate veining.
- around 29.75 - 30.0 m (sheared breccia, chloritic)
- around 34.6 m
- around 36.8 m
- around 37.5 - 37.8 m (sheared chloritic, rubbly, broken core).
- around 45.0 m, 45.9 m, 47.5 m.

Carbonate veining is associated with all the above possible fault zones.

Minor metamorphic spotting occurs from 41.3 - 42.0 m.

From about 18.4 - 21.4 m, the core could possibly be the top of normal pyroxene garnet hornfels, consisting of possible sparse siliceous (?) sulphide masses.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/17

748.6 - 750.0 m

PROBABLE FAULT

Probable fault zone somewhere in here or possibly slightly higher at 47.5 m. The core appears to be recemented and obviously fractured although competent. Pyroxene hornfels is present and grades imperceptibly into banded lower C lens.

Scheelite mineralization is present.

750.0 - 61.6 m

LOWER C LENS - BANDED SKARN

Well banded / bedded but somewhat fractured lower C lens skarn with fairly good disseminated scheelite mineralization. In places the core looks alightly weathered.

Broken zones within the core occur around 54.2 - 54.6 m, around 57.7 m and 58.8 - 59.0 m (rubbly).

The base of the unit is taken where the percentage of skarn falls below 50% of the total rock.

The following bedding angles were noted -

60° LCA at 51.0 m
80° LCA at 58.5 m
80° LCA at 61.0 m

61.60 - 68.85 m

BANDED FOOTWALL BEDS

Well banded / bedded unit consisting of biotite hornfels / pyroxene hornfels / marble and minor skarn interbeds with some scheelite mineralization. Bedding is uniformly consistent throughout at about 80° to the LCA.

68.85 - 68.95 m

POSSIBLE FAULT OR SHEARED LOWER VOLCANIC CONTACT

Brecciated and puggy fault zone or the sheared contact with lower volcanics, possibly caused by varying rock competence.

68.95 - 76.00 m

LOWER VOLCANICS

Typical greenish grey and speckled lower volcanics. Broken core occurs at the bottom of the hole from 75.8 - 76.0 m.

EOH 76.0 m.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/16

Survey method: Multishot Camera
Final depth: 85.0 m
Casing depth: 1 m

Depth surveyed to: 85 m
Date surveyed: 18-5-78
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
15	001	351	16.5	-73.5	14.38	4.21	0.67
24	001	351	16.25	-73.75	23.02	6.70	1.06
36	002	352	16.0	-74.0	34.56	9.98	1.52
60	001	351	16.0	-74.0	57.63	16.51	2.55
75	355	345	16.0	-74.0	72.05	20.53	3.48
85	359.5	349.5	16.0	-74.0	81.66	23.24	3.98

REMARKS:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/16

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	TO	Length	Length Recovered	WO ₃	Mo	
D 7687	0	1	1.0	1.0	0.41	0.07	
88	1	2	"	"	0.20	0.02	
89	2	3	"	"	0.14	0.01	
90	3	4	"	"	0.17	0.01	
91	4	5	"	"	<0.01	<0.01	
92	5	6	"	"	<0.01	<0.01	
93	6	7	"	"	<0.01	<0.01	
94	7	8	"	"	0.01	<0.01	
95	8	9	"	"	0.32	0.02	
96	9	10	"	"	<0.01	<0.01	
97	10	11	"	"	<0.01	<0.01	
98	11	12	"	"	<0.01	<0.01	
99	12	13	"	"	<0.01	<0.01	
D 7700	31	32	"	"	0.18	0.01	
1	32	33	"	"	0.06	<0.01	
2	33	34	"	"	<0.01	<0.01	
3	34	35	"	"	0.02	<0.01	
4	35	36	"	"	0.02	<0.01	
5	36	37	"	"	<0.01	<0.01	
D 7706	73	74	"	"	0.01	<0.01	
7	74	75	"	"	0.03	<0.01	
8	75	76	"	"	<0.01	<0.01	
9	76	77	"	"	<0.01	<0.01	
10	77	78	"	"	<0.01	<0.01	
11	78	79	"	"	<0.01	<0.01	
12	79	80	"	"	0.02	<0.01	
13	80	81	"	"	0.18	0.01	
14	81	82	"	"	<0.01	<0.01	
15	82	83	"	"	<0.01	<0.01	

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 240/16

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC- TURES /m	JOINT ANGLE (WRT FAOC)	JOINT FILLING	BEDDING ANGLE (W R.T. L.A.O.C.)	% CORE RECO- VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 12.5	B lens	6-7		Clay, chl, cal,	80°-5.5 m	100	87	
12.5 - 27.25	Bh	3-4		Chl, sulph	56°-13 m	100	85	
27.25-37.30	PGH	6-10		Chl, carb, cal, sul		100	64	
37.30 - 52.4	Bh	12-15		Chl, clay, carb,		100	36	
52.4 - 65.6	Bh	8-10		Chl, clay, carb		100	66	
65.6 - 67.6	Bh	7-15		Chl, clay, carb		100	23	
67.6 - 82.35	Pgh	4-7-20		Clay, chl, carb, cal		100	73	
82.35- 85.0	Bh/Ph	14		Clay, chl		100	62	

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No.

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.2	3.2	3.2	100
3.2 - 5.4	3.2	3.2	100
5.4 - 8.4	3.0	3.0	100
8.4 - 11.4	3.0	3.0	100
11.4 - 14.4	3.0	3.0	100
14.4 - 15.0	0.6	0.6	100
15.0 - 18.0	3.0	3.0	100
18.0 - 20.0	2.0	2.0	100
20.0 - 21.2	1.2	1.3	108
21.2 - 23.3	2.1	2.1	100
23.3 - 26.3	3.0	3.0	100
26.3 - 29.3	3.0	3.0	100
29.3 - 31.4	2.1	2.1	100
31.4 - 34.4	3.0	3.0	100
34.4 - 36.1	1.7	1.9	112
36.1 - 37.4	1.3	1.3	100
37.4 - 39.5	2.1	2.1	100
39.5 - 40.7	1.2	1.2	100
40.7 - 41.9	1.2	1.3	108
41.9 - 43.2	1.3	1.4	108
43.2 - 43.5	0.3	0.4	133
43.5 - 45.0	1.5	1.5	100
45.0 - 46.3	1.3	1.3	100
46.3 - 47.1	0.8	0.8	100
47.1 - 48.5	1.4	1.5	107
48.5 - 51.7	3.2	3.2	100
51.7 - 52.4	0.7	0.7	100
52.4 - 52.7	0.3	0.3	100
52.7 - 53.6	0.9	1.0	111
53.6 - 56.6	3.0	3.0	100
56.6 - 59.6	3.0	3.0	100
59.6 - 62.6	3.0	3.0	100
62.6 - 65.6	3.0	3.0	100
65.6 - 68.2	2.6	2.6	100
68.2 - 71.2	3.0	3.0	100
71.2 - 73.1	1.0	2.0	105
73.1 - 76.0	2.9	3.0	103
76.0 - 79.0	3.0	3.0	100
79.0 - 82.0	3.0	3.0	100
82.0 - 85.0	3.0	3.0	100
EOH 85.00 m			

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/16

0.0 - 12.5 m

B LENS - MARBLE

Massive b lens marble with minor pyroxene hornfels / grossular garnet throughout, particularly from 0.0 - 1.6 m and 12.1 - 12.4 m.

Numerous calcite / clay? veins occur throughout.

Bedding is indistinct but could possibly be approx. 80° to LCA at 5.5 m.

Minor scheelite mineralization is present, particularly the top 3 m of the unit.

12.5 - 27.25 m

BIOTITE HORNFELS

Dark brown to greyish, fine grained biotite hornfels with numerous pyroxene hornfels alteration zones and patches at the top from 12.5 - 15.0 m.

Minor elongate spots occur from 20.9 - 21.2 m.

?So 56° to LCA at 13.0 m.

Broken rubble occurs around 15.0 m.

27.25 - 37.30 m

PYROXENE GARNET HORNFELS

Typical pyroxene garnet hornfels with angular calcite fragments up to 5 cm across. The pyroxene garnet hornfels is increasingly skarnetised from 30.5 - 37.3 m where minor scheelite mineralization is present and numerous quartz - calcite - chlorite blobs and irregular masses are developed.

Fracturing of the pyroxene garnet hornfels at the base from 35.2 - 37.3 m is due to the major fault below.

A barren patch of biotite hornfels appears to be present from 29.55 - 30.45 m.

37.30 - 37.4 m

FAULT

Major fault with associated, breccia, rubble, clay and pug.

37.4 - 767.60 m

BIOTITE HORNFELS

Dark brown to grey coloured biotite hornfels with numerous zones of metamorphic spotting, particularly from 59 - 62 m.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/16

Broken and fractured core is common from 37.4 - 52.5 m and 65.6 - 67.60 m where numerous fault and shear zones are present. ie around 42.9 m 44.35 m, 45.0 m (minor carbonate and breccia), around 47.1 m, 48.0 m (recemented breccia), 52.4 m, around 63 m, 65.6 m (badly broken) and around 66.6 m (fractured and broken).

767.60 - 782.35 m

PYROXENE GARNET HORNFELS

Typical pyroxene garnet hornfels with rounded to angular calcite fragments up to 7 cm across. The unit is patchily mineralized towards the base.

The top from 67.6 - 69.8 m contain some large but somewhat sparse fragments.

Very minor scheelite mineralization is present. Possible minor faulting within the pyroxene garnet hornfels occurs at 73 m.

782.35 - 85.0 m

BIOTITE HORNFELS / PYROXENE HORNFELS

Banded or bedded biotite hornfels/pyroxene hornfels with possible shearing at the top of the unit. The contact with pyroxene garnet hornfels above is diffuse and irregular with minor aplite veins. No obvious fault is present apart from sheared clay at 83.85 m.

EOH 85.00 m.

GEOPEKO DIVISION - King Island

LOG OF D.D.H. No. D 240/15 EXTENSION

PLANNING

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

Location: -150 m. R.L. Drill Drive.....

.....

Purpose of Hole: Ip. test for C lens between Central & Wedge Faults.

Co-ords: E N

Inclination:

Bearing:^oGrid^oMag

Target: E N

Depth:

Approved by: Date:

SURVEY

Survey Co-ords: E N

Surveyed Bearing:^oGrid^oMag

Surveyed in by: Date

Actual Co-ords: E N

R.L. of Collar:

Inclination of Hole:

Picked up By: Date

SUMMARY

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

Results: 83 - 100 m, 17 m @ 1.49% WO₃.....

102 - 104 m, 2 m @ 0.52% WO₃.....

.....

.....

DRILLING

Date Commenced: Date Terminated.....

Driller/Contractor

Casing:	Size :			
	Depth :			
Core:	Size :	46TT		
	Depth :	125.1		

Wedge Runoff:

Wedge placed: Depth

Proposed by: Approved by

Reason

Extension:

Final Depth: 125.1 m

Reason for Termination:

Condition of hole on completion:

Casing;

Cemented:

Bore hole survey:

Water:

Comments on Drilling Conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/15 EXTENSION

Survey method: Singleshot Camera
Final depth: 125.1 m
Casing depth: 1 m

Depth surveyed to: 125.1 m
Date surveyed 18-5-1978
Surveyed by: L. Denby
Checked by: A. Younger

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
16	007	357	18	-72	15.21	4.93	0.25
79	001	351	16.75	-73.25	75.54	22.80	3.09
97	359.5	349.5	16.5	-73.5	92.20	27.88	4.02
112	356	346	16.6	-73.5	107.18	32.01	5.05
125.1	358.75	348.75	16.75	-73.25	119.72	35.71	5.79

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/15

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
80.9 - 81.8	0.9	1.0	111
81.8 - 84.7	2.9	2.5	86
84.7 - 87.7	3.0	3.0	100
87.7 - 90.7	3.0	3.0	100
90.7 - 93.7	3.0	3.0	100
93.7 - 96.7	3.0	3.0	100
96.7 - 99.7	3.0	3.0	100
99.7 - 100.1	0.4	0.4	100
100.1 - 100.8	0.7	0.7	100
100.8 - 100.9	0.1	0.1	100
100.9 - 101.1	0.2	0.2	100
101.1 - 104.1	3.0	3.0	100
104.1 - 107.1	3.0	3.0	100
107.1 - 110.1	3.0	3.0	100
110.1 - 113.1	3.0	3.0	100
113.1 - 116.1	3.0	3.0	100
116.1 - 119.1	3.0	3.0	100
119.1 - 122.1	3.0	3.0	100
122.1 - 125.1	3.0	3.0	100
EOH 125.1 m			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/15

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	TO	Length	Length Recovered	WO ₃	Mo	
D 7753	78	79	1.0	1.0	0.09	0.01	
54	79	80	"	"	0.07	<0.01	
55	80	81	"	"	0.01	<0.01	
56	81	82	"	"	0.26	0.02	
57	82	83	"	"	0.21	0.01	
58	83	84	"	"	1.26	0.02	
59	84	85	"	"	1.72	0.03	
60	85	86	"	"	1.65	0.04	
61	86	87	"	"	4.8	0.11	
62	87	88	"	"	1.54	0.04	
63	88	89	"	"	1.24	0.04	
64	89	90	"	"	1.05	0.05	
65	90	91	"	"	1.26	0.03	
66	91	92	"	"	0.94	0.05	
67	92	93	"	"	0.88	0.03	
68	93	94	"	"	1.03	0.03	
69	94	95	"	"	0.88	0.02	
70	95	96	"	"	1.06	0.09	
71	96	97	"	"	3.4	0.17	
72	97	98	"	"	0.95	0.02	
73	98	99	"	"	1.13	0.02	
74	99	100	"	"	0.62	0.02	
75	100	101	"	"	0.13	0.01	
76	101	102	"	"	0.20	<0.01	
77	102	103	"	"	0.55	0.01	
78	103	104	"	"	0.48	0.53	
79	104	105	"	"	0.08	0.11	
80	105	106	"	"	<0.01	<0.01	
81	106	107	"	"	<0.01	0.01	
82	107	108	"	"	<0.01	0.01	
83	108	109	"	"	<0.01	0.02	
84	109	110	"	"	<0.01	0.02	
85	110	111	"	"	0.01	0.01	
86	111	112	"	"	<0.01	0.01	
87	112	113	"	"	<0.01	0.01	
88	113	114	"	"	0.03	0.02	
89	114	115	"	"	0.03	0.01	

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No.

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC- TURES /m	JOINT ANGLE (WRT I.AOC)	JOINT FILLING	BEDDING ANGLE (M.R.T. L.A.O.C.)	% CORE RECO- VERY	R.Q.D.	REMARKS (WEATHERING)
80.9 - 83.6	PGH	8		Chl, clay, carb		90	74.1	
83.6 - 99.4	Gh	5-6		Clay, carb		100	81.2	
99.4 - 106.3	M/M, banded Gh	10		Chl, clay, carb		100	70.3	
106.3 - 119.85	Bh/Ph	8		Chl, clay, carb	77°: 109.4m 68°: 111.9m	100	70.1	
119.85 - 125.1	Granite	5		Carb, qtz		100	80.6	
EOH 125.1 m								

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/15 EXTENSION

80.9 - 81.0 m

FAULT - rubble

Fault rubble at bottom of initial hole. Clayey chloritic pug - most washed away.

81.0 - 783.60 m ?

MINERALIZED PYROXENE GARNET HORNFELS?

Unusual unit which resembles mineralized pyroxene garnet hornfels with remnant chlorite - calcite quartz pods, some with reaction rims. In places epidote and sulphide are also present.

The unit is somewhat disturbed and slightly fractured.

Good disseminated scheelite mineralization is present from 82.8 - 83.6 m.

783.60 - 99.70 m.

UPPER C LENS - GARNET SKARN

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

Badly broken, clayed and fractured core (fault) occurs from 87.05 - 87.25 m.

Minor carbonate veining, possibly associated with fractures or shears, occur around 93 m, and 94.4 m.

The base of the unit appears to grade into mineralized marble marker below, and could well be put at 99.4 m.

99.70 - 101.35 m

MARBLE MARKER

Marble marker unit consisting of mainly marble with minor pyroxene hornfels (mainly at top contact) and biotite hornfels. The marble in places appears silicified.

A possible fault or shear occurs in the biotite hornfels (101.65 m) where clayey material is present.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/15 EXTENSION

101.35 - 106.30 m

LOWER C LENS - BANDED SKARN

Somewhat disturbed lower C lens skarn with bedding and banding poorly developed.

Minor scheelite mineralization is present, and visible Mo occurs from 103.6 - 104.2 m.

A fault breccia occurs around 105 m. A sheared broken zone also occurs around 106.2 m.

106.30 - 108.00 m

APLITE VEIN / DYKE

Fine grained and pinkish coloured aplite dyke / vein with no visible scheelite mineralization.

108.00 - 108.2

FAULT - BRECCIA ZONE

Recemented breccia - fault zone.

108.20 - 119.85

BIOTITE HORNFELS / PHYROXENE HORNFELS

Well banded / bedded sequence of Bh/Ph with rare grossular and andradite garnet interbeds. The unit is basically unmineralized and could be named unmineralized banded footwall beds.

An aplite dyke occurs from 110.7 - 111.6 m, and 115.45 - 116.35 m.

Possible lower volcanics (?) appear to be present from 116.65 - 117.30 m.

Abundant muscovite and pyroxene occurs at the contact with granite / adamellite below.

So 77° to LCA at 109.4 m

So 68° to LCA at 111.9 m

119.85 - 125.10 m

GRASSY GRANITE / ADAMELLITE

Coarse grained pink coloured granite/adamellite with no visible scheelite mineralization.

EOH 125.10 m.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 240/15

PLANNING

Proposer: M. J. Danielson

Depth: 85 metres

Location: M.14 Cuddy at 220 240 E

Purpose of hole: C lens oreblocking

Co-ordinates: 220 240 E 563 945

Inclination: -72°

Bearing 360 Grid

Target: E

Approved by: M.C.R.

N

Magnetic:

Target Depth:

N

Date: 1-7-77

SURVEY

Survey Co-ords: E

Survey bearing: 4° 50' Grid

Surveyed in by:

Actual Co-ords: 220 239.84 E 563 944.06

R.L. of Collar: F-147.1

Picked up by: R.J.H.

N

Magnetic:

Date:

N

Inclination of Hole: -72'00'

Date: 25-11-77

SUMMARY

Logged by: D. Cowan

Results: 48 - 62 m, 14 m @ 1.32% WO₃
69 - 76 m, 7 m @ 0.68% WO₃

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 22-11-77

Date terminated: 29-11-77

Casing: Size: BX

Depth: 1

Core: Size: 46TT

Depth: 80.90

Wedge Runoff:

Wedge placed:

Proposed by:

Reason:

Depth:

Approved by:

Extension: Nil

Reason for termination: Lower C lens completely defined

Condition of hole on completion:

Final depth: 80.9 metres

Casing: No

Cemented: No

Bore hole survey: Single shot to 80 metres

Water: No

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/15

Survey method: Singleshot
Final depth: 80.9 m
Casing depth: 1 m

Depth surveyed to: 80.0 m
Date surveyed to: 29-11-77
Surveyed by: L. Denby
Checked by: M. Danielson

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
39	001	351	17	-73	37.30	11.26	1.78
59	001	351	17	-73	56.43	17.04	2.69
80.9	359	349	17	-73	77.40	23.23	3.89

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/15

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.7	2.7	2.66	99
2.7 - 4.6	1.9	1.93	102
4.6 - 5.6	1.0	1.14	114
5.6 - 8.6	3.0	2.98	99
8.6 - 10.5	1.9	1.75	92
10.5 - 12.6	2.1	2.26	108
12.6 - 14.0	1.4	1.40	100
14.0 - 15.6	1.6	1.72	108
15.6 - 17.2	1.6	1.40	88
17.2 - 19.8	2.6	2.72	105
19.8 - 21.1	1.3	1.32	102
21.1 - 22.6	1.5	1.68	112
22.6 - 26.2	3.6	3.21	89
26.2 - 29.0	2.8	2.85	102
29.0 - 31.7	2.7	2.74	101
31.7 - 33.9	2.2	2.20	100
33.9 - 35.7	1.8	1.81	101
35.7 - 38.1	2.4	2.40	100
38.1 - 41.0	2.9	3.03	104
41.0 - 42.1	1.1	1.35	123
42.1 - 42.9	0.8	0.80	100
42.9 - 44.3	1.4	1.36	97
44.3 - 45.2	0.9	1.01	112
45.2 - 46.4	1.2	1.22	102
46.4 - 48.8	2.4	2.66	111
48.8 - 51.8	3.0	3.02	101
51.8 - 54.8	3.0	3.01	101
54.8 - 55.7	0.9	0.92	102
55.7 - 58.4	2.7	2.66	99
58.4 - 60.3	1.9	1.87	98
60.3 - 61.7	1.4	1.42	101
61.7 - 63.9	2.2	2.30	105
63.9 - 64.9	1.0	0.87	87
64.9 - 68.3	3.4	3.47	102
68.3 - 70.5	2.2	2.15	98
70.5 - 71.6	1.1	1.08	98
71.6 - 72.7	1.1	1.08	98
72.7 - 74.7	2.0	2.12	106
74.7 - 76.0	1.3	1.31	101
76.0 - 77.0	1.0	0.78	78
77.0 - 78.5	1.5	1.34	89
78.5 - 80.1	1.6	1.52	95
80.1 - 80.7	0.6	0.64	107
80.7 - 80.9	0.2	0.20	100
EOH			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/15

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	TO	Length	Length Recovered	WO ₃	Mo	
D 6701	2	3	1.0	1.0	0.29	0.01	
2	3	4	"	"	0.26	0.01	
3	4	5	"	"	0.49	0.05	
4	5	6	"	"	0.16	0.02	
D 6705	6	7	"	"	0.39	0.02	
D 6706	34	35	"	"	<0.01	0.01	
7	35	36	"	"	0.19	0.01	
8	36	37	"	"	0.42	0.02	
9	37	38	"	"	0.02	<0.01	
10	38	39	"	"	0.04	<0.01	
1	39	40	"	"	0.14	0.01	
2	40	41	"	"	0.20	<0.01	
3	41	42	"	"	0.23	0.02	
4	42	43	"	"	4.8	0.18	
5	43	44	"	"	<0.01	<0.01	
6	44	45	"	"	0.13	<0.01	
7	45	46	"	"	0.28	0.02	
8	46	47	"	"	0.01	<0.01	
9	47	48	"	"	0.19	0.02	
20	48	49	"	"	0.77	0.04	
1	49	50	"	"	1.48	0.09	
2	50	51	"	"	1.55	0.09	
3	51	52	"	"	1.18	0.07	
4	52	53	"	"	0.42	0.03	
5	53	54	"	"	0.84	0.06	14 m @ 1.32% WO ₃
6	54	55	"	"	1.80	0.09	
7	55	56	"	"	1.63	0.08	
8	56	57	"	"	1.09	0.07	
9	57	58	"	"	2.8	0.10	
30	58	59	"	"	1.53	0.06	
1	59	60	"	"	1.36	0.06	
2	60	61	"	"	0.38	0.02	
3	61	62	"	"	1.62	0.08	
D 6734	62	63	"	"	<0.01	0.01	
D 6735	69	70	"	"	0.70	0.04	
6	70	71	"	"	0.90	0.04	

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/15

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO ₃	Mo		
7	71	72	1.0	1.0	0.68	0.04	7 m @ 0.68% WO ₃	↓
8	72	73	"	"	1.17	0.06		
9	73	74	"	"	0.20	0.02		
40	74	75	"	"	0.62	0.03		
1	75	76	"	"	0.49	0.02		
2	76	77	"	"	0.26	0.02		
D 6743	77	78	"	"	0.23	0.01		↑

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/15

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 - 34.32	ph/bph	7		calcite, Fe - sulphides	(m) 60°:10.76 65°:13.44 67°:18.54 64°:31.02 65°:33.91	101	74	
34.32 - 48.80	ph/bph	13		minor calcite	-	102	58	
48.80 - 64.90	andradite skarn/ch	7		minor calcite	60°:60.38 51°:62.26 50°:63.11	100	80	
64.90 - 80.90	bh/ EOH andradite skarn	15		Minor Fe-sulphides	60°:68.25 71°:72.22 81°:74.39 75°:75.20 77°:76.12	98	26	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) \pm $\frac{\text{length core } >10 \text{ cms}}{\text{length drilled}} \%$
- Core size.

46TT = 36 mm dia.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/15

0.0 - 8.22

Pyroxene hornfels

This interval consists of mainly pyroxene hornfels but some patches are rich in grossular garnet. Sub - grade scheelite mineralization occurs

Between:

2.74 - 3.46
4.47 - 4.61 (coarse crystals)
5.23 - 5.41 (coarse crystals)
5.81 - 6.94

8.22 - 34.32

Biotite pyroxene hornfels

A fairly uniform sequence of bph showing weak to disturbed bedding.

Biotite spotting occurs between:

27.02 - 27.70
31.13 - 31.70

34.32 - 48.14

Podded pyroxene - garnet hornfels.

Typical pgh showing calcite pods (up to 4 cm dia.) throughout. Scheelite mineralization is sub - grade and it is sometimes only present as scattered flecks.

48.14 - 61.70

Andradite skarn

A coarse andradite skarn (garnets up to 0.8 mm dia.) containing probable ore - grade scheelite throughout.

A barren marble band occurs between 60.30 - 60.80.

61.70 - 65.21

Marble

A uniform greyish weakly bedded marble.

65.21 - 80.90 EOH

Interbedded Skarn and biotite hornfels

The rock over this interval is very brecciated. Scheelite, associated with the skarn intervals occurs

Between:

69.52 - 69.76 (sub - grade)
69.76 - 71.68 (prob. ore - grade)
71.94 - 73.04 (prob. ore - grade)
73.90 - 74.47 (prob. ore - grade)
74.47 - 77.37 (sub - grade)

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 240/14

PLANNING

Proposer: M. Danielson

Depth: 170m

Location: -150m RL. K9/Q9

Purpose of hole: C lens ore blocking

Co-ordinates: 220 240 E 563943

Inclination: -54°

Bearing 180 Grid

Target: E

Approved by: M. C. R.

N

Magnetic:

Target Depth:

N

Date: 1-7-77

SURVEY

Survey Co-ords: E

Survey bearing: Grid

Surveyed in by:

Actual Co-ords: 220 240.18 E 563 943.03

R.L. of Collar: C - 147.0

Picked up by: R. J. H.

N

Magnetic:

Date:

N

Inclination of Hole:

Date: 14-10-77

SUMMARY

Logged by: M. Danielson

Results: B lens: 3 - 6m; 3m @ 1.23% WO₃ 0.06% MO.

C lens: 155-165m; 10m @ 1.13% WO₃ 0.03% MO.

DRILLING

Driller/Contractor: A. D. D.

Date commenced: 19-9-77

Date terminated: 4.10.77

Casing: Size: BX

Depth: 1m

Core: Size: 46TT

Depth: 178.6

Wedge Runoff:

Wedge placed: Nil

Proposed by:

Reason:

Depth:

Approved by:

Extension: Nil

Reason for termination: Hole in granite basement

Condition of hole on completion:

Final depth: 178.6

Casing: 1m BX remains

Cemented: Yes

Bore hole survey: Multishot to 129m

Water: Nil

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 240/14

Survey method: Multishot Camera

Final depth : 178.6m

Casing depth : 1m

Depth surveyed to: 129m

Date surveyed: 4-10-77

Surveyed by : L. Denby

Checked by : M. D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
30	184	174	35	-55	24.58	17.10	1.88
60	185	175	34.5	-55.5	49.26	34.08	3.44
90	185.5	175.5	34.25	-55.75	74.02	50.94	4.99
129	186	176	34	-56	106.16	72.97	6.45

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/14

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 -4.8	4.8	3.0	62
6.4	1.6	3.0	187
9.4	3.0	2.95	98
12.5	3.1	3.05	98
15.5	3.0	3.0	100
18.5	3.0	3.0	100
21.5	3.0	3.0	100
24.5	3.0	3.0	100
27.5	3.0	3.0	100
30.5	3.0	3.0	100
33.5	3.0	3.0	100
36.5	3.0	2.95	98
39.5	3.0	3.0	100
42.5	3.0	3.0	100
45.5	3.0	3.0	100
48.5	3.0	3.0	100
51.5	3.0	3.0	100
54.5	3.0	3.0	100
57.5	3.0	3.0	100
60.5	3.0	2.95	98
-62.8	2.3	2.3	100
-64.5	1.7	1.45	85
66.3	1.8	1.8	100
67.0	0.7	0.7	100
70.5	3.5	3.4	97
73.5	3.0	2.95	98
76.5	3.0	3.0	100
79.5	3.0	2.95	98
81.8	2.3	2.2	96
84.7	2.9	2.8	97
87.7	3.0	3.0	100
90.7	3.0	3.0	100
93.7	3.0	3.0	100
96.7	3.0	3.0	100
101.3	4.6	4.2	91
104.3	3.0	3.0	100
107.3	3.0	3.0	100
110.3	3.0	3.0	100
113.3	3.0	3.0	100
116.3	3.0	3.0	100
119.3	3.0	3.0	100
122.3	3.0	3.0	100
125.3	3.0	3.0	100
-128.3	3.0	3.0	100
-131.3	3.0	3.0	100
-134.3	3.0	3.0	100
137.3	3.0	3.0	100

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/14

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
140.3	3.0	3.0	100
143.3	3.0	3.0	100
145.8	2.5	3.0	120
148.8	3.0	2.9	97
151.8	3.0	3.0	100
154.8	3.0	3.0	100
157.8	3.0	3.0	100
160.8	3.0	3.0	100
163.8	3.0	3.0	100
166.8	3.0	3.0	100
169.8	3.0	3.0	100
172.8	3.0	3.0	100
175.6	2.8	2.8	100
178.6	3.0	3.0	100
EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/14

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 - 42.5	gph bph	4		clay carbonate	2/m: 45°	99	84	
24.1 - 24.5m	<u>Fault ?</u>			carbonate recemented breccia				
42.5 - 87.7	ph, ch tuffite	4		clay carbonate	48m: 50°	99	85	
				carbonate recemented breccia 62.5 - 62.8m lost core 62.8 - 64.5 =15% Broken ground 66.5 - 67.5m				
87.7 - 113.3	bph, ch	5		clay carbonate		98	82	
				110.70 - 110.75) both are clay and carbonate 111.0 - 11.05) recemented breccia zones.				
113.3 - 143.3	bh	5		clay carbonate		100	84	Broken ground 113.3 - 116.3m
143.3 - 154.8	pgh	5		clay		99	87	Broken ground 144.5 - 145.8
154.8 - 178.6	gh granite	4		clay		100	90	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm = \frac{\text{length core } > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size.
46TT = 36mm dia

GEOPEKO LIMITED -

ASSAY DATA

D.D.H. No. D 240/14

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 6274	0	1	1.0	1.0	<0.01	<0.01	
5	1	2	"	"	<0.01	<0.01	
6	2	3	"	"	0.14	<0.01	
7	3	4	"	"	1.07	0.05	B lens
8	4	5	"	"	1.27	0.05	3 - 6m,
9	5	6	"	"	1.36	0.08	3m @ 1.23% WO ₃ 0.06% Mo
80	6	7	"	"	0.03	<0.01	
D 6281	7	8	"	"	<0.01	<0.01	
D 6282	18	19	1.0	1.0	3.35	0.15	
D 6283	83	84	1.0	1.0	0.03	<0.01	
4	84	85	"	"	<0.01	<0.01	
5	85	86	"	"	0.67	0.03	
D 6286	86	87	"	"	<0.01	<0.01	
D 6287	153	154	1.0	1.0	<0.01	<0.01	
8	154	155	"	"	<0.01	<0.01	
9	155	156	1.0	1.0	0.91	0.01	↓
90	156	157	"	"	1.64	0.04	C lens:
1	157	158	"	"	1.62	0.03	155 - 165m,
2	158	159	"	"	1.31	0.02	10m @
3	159	160	"	"	0.81	0.01	1.13% WO ₃
4	160	161	"	"	0.91	0.02	0.03% Mo
5	161	162	"	"	1.63	0.05	
6	162	163	"	"	0.75	0.02	
7	163	164	"	"	1.39	0.04	
8	164	165	"	"	0.33	<0.01	↑
9	165	166	"	"	0.17	<0.01	
D 6300	166	167	"	"	<0.01	<0.01	

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/14

- 00 - 113.3 B lens
- 00 - 6.5 Garnet pyroxene hornfels
Moderately mineralised pyroxene rich skarn.
- 6.5 - 8.5 Marble
Barren grey ch
- 8.5 - 47.0 Biotite pyroxene hornfels
Barren grey and pale green hornfels. Minor bedding apparent.
Fault 24.1 - 24.5 carbonate recemented breccia. Coarse scheelite 18.- 19m.
- 47.0 - 57.2 Pyroxene hornfels
Mainly a green ph with minor grossular garnet developed between 47 - 51m. Clay recemented breccia 53.2 - 53.6
- 57.2 - 79.0 Marble
Basically a barren grey ch. Minor gph developed 71 - 72m but no significant mineralisation.
- 79.0 - 83.5 Tuffite
Very micaceous green grey massive unit
Weakly fragmental texture in part.
- 83.5 - 88.7 Marble
Barren grey ch Minor disseminated scheelite
85.0 - 85.6 and 88.5 - 88.7m.
- 88.7 - 102.0 Biotite pyroxene hornfels
Barren green ph with very minor pink grossular garnet and barren grey bh. Between 93 - 96m mainly brown bh containing pale white grey fragments.
- 102.0 - 113.3 Marble
Barren grey ch

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/14

113.3 - 142.7

HANGING WALL BIOTITE HORNFELS

Barren grey brown biotite hornfels. Core is badly broken 113.3 - 116.3 but is probably poor ground at base of B lens sequence rather than a fault.

142.7 - 155.0

PYROXENE GARNET HORNFELS

Essentially barren green ph with white carbonate pods rimmed by pale brown grossular garnet.

155.0 - 165.5

GARNET HORNFELS

Medium grained brown andradite garnet containing abundant finely disseminated scheelite to 164.4. Very weakly mineralised then to 165.5.

165.5 - 170.8

MARKER HORIZON(?)

This unit is almost entirely a barren grey marble except for minor bh 166.5 - 167.0.

170.8 - 173.2

GARNET PYROXENE HORNFELS

Domiantly a green pyroxene unit and pale whitish pink grossular garnet. Very occasional speck of scheelite but otherwise barren.

173.2 - 178.6

ADAMELLITE

Fine grained barren whitish pink adamellite.

178.6m EOH.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/14

I.A.B.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.I.			HOLE No.
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo		
6278	1.27		6557	1.10		6558	1.20		6559	1.21		D 240/14	
6285	0.67		6560	0.83		6561	0.87		6562	0.73		"	
6295	1.63		6566	1.59		6567	1.64		6568	1.40		"	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 240/13

PLANNING

Proposer: M. J. Danielson

Depth: 150m

Location: -150m R.L. K9/Q9

Purpose of hole: C lens oreblocking

Co-ordinates: 220 240 E 563 943

Inclination: -62°

Bearing 180 Grid

Target: E

Approved by: M. C. R.

N

Magnetic:

Target Depth:

N

Date: 1.7.77

SURVEY

Survey Co-ords: E

Survey bearing: 180° 10° Grid

Surveyed in by:

Actual Co-ords: 220 240.23 E 563 943.36

R.L. of Collar: R - 146.9

Picked up by: R. J. H.

N

Magnetic:

Date:

N

Inclination of Hole: -62° 10°

Date: 050977

SUMMARY

Logged by: G. Buckland

Results: B lens 3-7m 4m @ 0.74% WO₃, B lens 37-47m 10m @ 0.86% WO₃
C lens 126-137m 11m @ 1.39% WO₃

DRILLING

Driller/Contractor: A. D. D.

Date commenced: 2-9-77

Date terminated: 19-9-77

Casing: Size:

Depth: 1m

Core: Size: 46TT

Depth: 157.7

Wedge Runoff:

Wedge placed: Nil

Proposed by:

Reason:

Depth:

Approved by:

Extension: Nil

Reason for termination: Hole passed below mineral horizon.

Condition of hole on completion:

Final depth: 157.7m

Casing: 1m remains

Cemented: yes

Bore hole survey: multishot to 129m

Water: Nil

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 240/13

Survey method: Multishot Camera

Final depth : 157.7

Casing depth : 1 metre

Depth surveyed to: 129.0

Date surveyed: 15.9.77

Surveyed by : L. Denby

Checked by : M.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
30	181	171	-28	-62	26.48	13.90	2.20
60	182.5	172.5	-27.75	-62.25	53.04	27.76	3.84
90	185	175	-27.25	-62.75	79.66	41.54	5.23
114	185	175	-27.25	-62.75	101.00	52.48	6.19
129	186	176	-27.25	-62.75	114.33	59.33	6.65

REMARKS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D-240/13

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 23.70	bh gph/	2		minor carbonate, eg @ 12.6; minor pyrite		99	47	minor rubble: 10.38-10.56 23.5-23.7
23.70 50.7	ph/ gph/ ch	2		clay		99	68	core ? brecciated @ 31.80 carbonate recemented breccia; 46.80-46.95
50.7 84.10	ch/ tuffite/2 ch/bh			minor pyrite		99	55	core is of fair quality through out but badly broken: 59.5-63.1, 68.85-68.92 carbonate recemented breccia: 69.68-69.74
84.1 107.1	bh	7		minor carbonate		94	48	rubble: 95.1-96.2 98.8-100.5 102.86-103.0 Brecciated puggy core: 87.83- 87.94 100.55-100.67 faults

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm \frac{\text{length core} > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/13

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)
107.1 - 125.1	pgh	3		clay		100	93	
125.1 - 137.1	gh	5		clay		100	92	
137.1 - 152.5	marker/ gph	7		clay	145m: 35° 150m: 55° 156m: 40°	99	79	broken ground 145.9-146.2
152.5 - 157.7	bh/ph	6		clay		96	73	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) \pm $\frac{\text{length core } > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size. $\overset{7}{0-157.7}$ 46tt (36mms. dia)

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/13

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 6.5	6.5	6.25	96
9.5	3.0	2.98	99
11.2	1.70	1.71	100
12.5	1.30	1.34	103
15.5	3.0	2.92	97
18.5	3.0	2.97	99
21.5	3.0	3.00	100
23.7	2.20	2.20	100
26.7	3.0	2.86	95
29.7	3.0	2.98	99
32.7	3.0	3.00	100
35.7	3.0	3.00	100
38.7	3.0	3.00	100
41.7	3.0	2.98	99
44.7	3.0	2.86	95
47.7	3.0	3.00	100
50.7	3.0	2.98	99
53.7	3.0	3.02	107
56.7	3.0	3.00	100
59.7	3.0	3.00	100
60.6	0.90	0.90	100
61.4	0.80	0.95	119
63.1	1.70	1.60	94
66.1	3.0	2.96	99
69.1	3.0	2.97	99
72.0	2.90	2.80	97
73.7	1.70	1.76	103
76.6	2.90	2.78	96
79.6	3.0	2.95	98
81.1	1.50	1.55	103
84.1	3.00	2.93	98
89.0	4.90	4.16	85
92.0	3.0	2.98	99
94.3	2.30	2.25	98
95.1	0.80	0.70	88
98.0	2.90	2.83	98
99.5	1.50	1.52	101
100.0	0.50	0.50	100
103.0	3.0	2.60	87
107.1	4.10	4.06	99
110.1	3.0	2.93	98
113.1	3.0	2.97	99
116.1	3.0	3.0	100
119.1	3.0	3.0	100
122.1	3.0	3.0	100

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/13

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
-125.1	3.0	3.0	100
128.1	3.0	3.0	100
131.1	3.0	3.0	100
134.1	3.0	3.0	100
137.1	3.0	3.0	100
140.1	3.0	3.0	100
143.1	3.0	3.0	100
146.1	3.0	3.0	100
146.6	0.5	0.5	100
149.5	2.9	2.8	97
152.5	3.0	3.0	100
155.5	3.0	2.9	97
157.7	2.2	2.1	95
EOH			

GEOPRO LIMITED -

ASSAY DATA

L.D.H. No. D 240/13

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo		
D 6212	2	3	1.0	1.0	0.05	<0.01	B lens 3-7 4m	a) 0.14% WO ₃
3	3	4	"	"	0.27	<0.01		
4	4	5	"	"	0.55	0.04		
5	5	6	"	"	1.79	0.08		
6	6	7	"	"	0.34	0.02		
6217	7	8	"	"	<0.01	<0.01		
D 6218	26	27	1.0	1.0	1.73	0.07	B lens	
9	27	28	"	"	0.86	0.04		
20	28	29	"	"	<0.01	<0.01	B lens	
1	29	30	"	"	<0.01	<0.01		
2	30	31	"	"	1.54	0.06		
3	31	32	"	"	1.56	0.06		
4	32	33	"	"	<0.01	<0.01		
5	33	34	"	"	<0.01	<0.01		
6	34	35	"	"	<0.01	<0.01	B lens 37-47 10m	a) 0.86% WO ₃
7	35	36	"	"	0.02	<0.01		
8	36	37	"	"	0.20	<0.01		
9	37	38	"	"	0.94	0.04		
30	38	39	"	"	0.50	0.04		
1	39	40	"	"	0.61	0.04		
2	40	41	"	"	0.32	0.01	B lens 37-47 10m	a) 0.86% WO ₃
3	41	42	"	"	0.48	0.03		
4	42	43	1.0	1.0	0.73	0.03		
5	43	44	"	0.9	2.23	0.09		
6	44	45	"	1.0	1.74	0.08		
7	45	46	"	"	0.65	0.03		
D 6238	46	47	"	"	0.40	0.02		
D 6239	112	113	1.0	1.0	0.24	0.08		
40	113	114	"	"	0.07	0.01		
1	114	115	"	"	0.29	0.02		
2	115	116	"	"	1.60	0.07		
3	116	117	"	"	<0.01	<0.01		
4	117	118	"	"	<0.01	<0.01		
5	118	119	"	"	<0.01	<0.01		
6	119	120	"	"	0.25	0.02		
7	120	121	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED -

ASSAY DATA

L.D.H. No. D 240/13

Sample No.	DEPTH METRES				ELEMENTS			COMMENTS	
	From	To	Length	Length Recovered	WO ₃	Mo			
8	121	122	1.0	1.0	<0.01	<0.01			
9	122	123	"	"	0.23	0.01			
50	123	124	"	"	0.04	0.01			
1	124	125	"	"	0.14	0.01			
2	125	126	"	"	0.07	0.01			
3	126	127	"	"	0.57	0.03	↓ Upper C lens 126-137 11% @ 1.37% WO ₃ ↑		
4	127	128	"	"	1.76	0.07			
5	128	129	"	"	2.10	0.07			
6	129	130	1.0	1.0	1.47	0.06			
7	130	131	"	0.9	1.36	0.08			
8	131	132	"	1.0	1.77	0.07			
9	132	133	"	"	3.23	0.11			
60	133	134	"	"	0.44	0.01			
1	134	135	"	"	1.44	0.05			
2	135	136	"	"	0.25	0.01			
3	136	137	"	"	0.93	0.04			
D 6264	137	138	"	"	<0.01	<0.01			
		138-6							
D 6265	142	143	1.0	1.0	0.06	<0.01			
6	143	144	"	"	0.61	0.02			
7	144	145	"	"	<0.01	<0.01			
8	145	146	"	"	0.06	<0.01	Lower C lens		
9	146	147	"	"	0.23	0.03			
70	147	148	"	"	1.00	0.06			
1	148	149	"	"	<0.01	<0.01			
2	149	150	"	"	<0.01	<0.01			
D 6273	150	151	"	"	0.23	<0.01			

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/13

0 - 1.52

BIOTITE HORNFELS

A disturbed gray - black barren bh.

1.52 - 68.43

B LENS

1.52 - 8.12

GARNET PYROXENE HORNFELS

A pink - pale green gph containing low - medium grade scheelite mineralisation 2.20 - 6.40 and 6.95 - 7.14

8.12 - 22.3

BIOTITE HORNFELS

Dominantly a black barren massive fine grained bh. minor disturbed thin interbeds of pale green ph. are noted throughout. Between 17.3 - 17.84 the core is enriched in pyroxene and contains abundant ~~waste~~ coarse scheelite.

Quartz veins are present @ 14.3 and 14.4m.

Possible fault: 10.38 - 10.56m core is broken, appears brecciated and has chlorite as a fracture coating .

Bedding: 22m : 45⁰ LAOC.

22.3 - 26.3

PYROXENE HORNFELS

A pale green massive barren ph.

Possible fault: 23.3 - 23.7; core is broken, puggy (@ 23.52) and brecciated at 23.3

26.3 - 32.0

GARNET PYROXENE HORNFELS

A grey - pale green disturbed gph. containing low - medium grade scheelite mineralisation throughout. ~~waste~~ coarse scheelite 26.83 - 27.27.

32.0 - 36.6

PYROXENE HORNFELS / MARBLE

A green - white disturbed ph / ch with minor thin bh interbeds. Almost barren.

36.6 - 46.3

GARNET PYROXENE HORNFELS

A grey - pale green disturbed gph containing medium to high grade scheelite mineralisation. grade appears to increase toward the lower contact at 46.3m.

46.3 - 60.10

MARBLE

A white grey weakly bedded barren ch. minor

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/13

grossularite/ph development: 52.80 - 53:
Fault: 46.80 - 46.95 core is a recemented
breccia, fault ? @ 59.6; puggy broken core.

bedding
54.2m: 30° LAOC.

60.10 - 63.80

TUFFITE

A badly broken grey interval flecked with
biotite (?) throughout. Upper contact is at
32° to the overlying ch. Joint surfaces are
lustrous. Core displays a tuffaceous texture.

63.80 - 68.43

MARBLE

Dominantly a massive grey barren marble with
minor ph development from 68.02 containing very
weak scheelite mineralisation.

68.43 - 105.3

BIOTITE HORNFELS

From 68.43 - 76.8m the grey - black biotite
hornfels has a disturbed texture which in places
appears fragmental while looking vaguely podded/
poorly bedded in others. From 76.8m the texture
is fine grained and homogenous.

68.43 - 72.0. The bh appears sheared in
places with small pyrite cubes being present at
69.70 - 69.75. This latter interval probably
represents a fault zone.

86.16 - 86.28 is an interval of puggy broken
bh. Fault.

Core quality is good to approximately 87m
and becomes better to 95.1m. From 95.1m to 103m
the core is badly broken.

87.83 - 87.94 and 100.55 - 100.67 are intervals
of puggy brecciated bh. Faults.

105.3 - 126.6

PYROXENE GARNET HORNFELS

Pale greenish brown unit containing abundant
white carbonate avoids.

Quality of core is excellent. RQD = 93%

Unit is barren to 112m and variably (mostly
sub ore grade) below 112m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/13

126.6 - 136.6

GARNET HORNFELS

Massive medium grained andradite garnet hornfels containing high grade very finely disseminated scheelite. Below 135 unit is more pyroxene rich, fine grained and low mineralisation.

136.6 - 146.6

MARKER HORIZON (?)

A mixture of rock types as below with very minor mineralisation below 142m.

Marble	136.6 - 138.2
bh	138.2 - 140.5
ph/bh	140.5 - 141.5
gph	141.5 - 146.6

146.6 - 151.0

GARNET PYROXENE HORNFELS

Fine grained pyroxene rich andradite skarn containing low grade disseminated mineralisation. This unit is not banded as typical of the lower C lens.

151.0 - 157.7

BIOTITE PYROXENE HORNFELS

Barren thinly bedded bh/ph.

157.7m EOH.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/13

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.I.			HOLE No.
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo		
6215	1.79		6638	1.60		6639	1.75		6640	1.66		D 240/13	
6223	1.56		6632	1.41		6633	1.60		6634	1.54		"	
6230	0.50		6623	0.49		6624	0.65		6625	0.64		"	
6254	1.76		6620	1.72		6621	1.84		6622	1.59		"	
6235	2.23		6641	2.03		6642	2.22		6643	2.04		"	
6270	1.00		6629	0.98		6630	1.12		6631	1.17		"	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO.D 240/12

PLANNING

Proposer: M. Danielson Depth: 110m

Location: -150m K9 / Q9

Purpose of hole: C lens oreblocking

Co-ordinates: 220 240 E 563 950 N
Inclination: -77° Magnetic:
Bearing 180 Grid Target Depth:
Target: E N
Approved by: M.C. Rogers Date: 1/7/77

SURVEY

Survey Co-ords: E N
Survey bearing: 181° 00' Grid Magnetic:
Surveyed in by: Date:
Actual Co-ords: 220 240.23 E 563 943.68 N
R.L. of Collar: R - 147.0 Inclination of Hole: -76° 40'
Picked up by: R.J.H. Date: 29/8/77

SUMMARY

Logged by: G.L. Buckland
Results: Upper C lens 67 - 76m, 9m @ 0.83 Lower C lens 110 - 113,
Lower C lens 81 - 87m, 6m @ 0.84 3m @ 0.58
Upper C lens 97 - 108m, 11m @ 1.89

DRILLING

Driller/Contractor: A.D.D.
Date commenced: 24/8/77 Date terminated: 2/9/77

Casing:	Size:	BX			
	Depth:	1m			
Core:	Size:	BQ			
	Depth:	136m			

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

Extension: Nil
Reason for termination: Entered adamellite basement

Condition of hole on completion: Final depth: 136.0m
Casing: 1m BX remains
Cemented: yes

Bore hole survey: Surveyed to 136m
Water: Normal water return throughout.

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No.D 240/12

Survey method: Multishot camera

Final depth : 136.0m

Casing depth : 1m

Depth surveyed to:136.0m

Date surveyed:2/9/77

Surveyed by :L. Denby

Checked by :G.L. Buckland

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
15	185°	175°	13° 45'	-76° 15'	14.57	3.56	0.31
45	196°	186°	14° 15'	-75° 45'	43.66	10.86	0.18
75	197° 30'	187° 30'	14° 45'	-75° 15'	72.71	18.33	1.00
105	199°	189°	15°	-75°	101.71	25.93	2.24
136	202°	192°	15° 45'	-74° 15'	131.62	33.93	3.84

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D240/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 5.0	5.0	4.82	96
6.5	1.5	1.50	100
9.5	3.0	3.0	100
12.5	3.0	2.98	99
15.5	3.0	3.00	100
18.5	3.0	3.0	100
21.5	3.0	3.0	100
23.6	2.10	2.15	102
27.8	4.20	4.12	98
30.8	3.0	3.0	100
33.8	3.0	3.0	100
36.8	3.0	3.0	100
39.8	3.0	3.0	100
42.8	3.0	3.0	100
45.8	3.0	3.0	100
48.8	3.0	3.0	100
51.8	3.0	3.0	100
54.8	3.0	3.0	100
56.3	1.50	1.60	107
57.0	0.70	0.70	100
60.0	3.0	3.0	100
63.0	3.0	3.0	100
65.5	2.5	2.35	94
68.5	3.0	3.0	100
71.5	3.0	3.0	100
74.5	3.0	3.06	102
77.4	2.9	2.45	84
78.2	0.80	0.75	94
81.2	3.0	3.0	100
84.2	3.0	3.0	100
87.2	3.0	2.95	98
89.5	2.30	2.30	100
92.0	2.50	2.40	96
95.0	3.0	3.0	100
98.0	3.0	3.0	100
101.0	3.0	3.0	100
104.0	3.0	2.91	97
107.0	3.0	3.0	100
110.4	3.4	3.0	88
113.4	3.0	2.97	99
116.4	3.0	3.0	100
119.0	2.60	2.70	104
122.0	3.0	3.0	100
125.0	3.0	2.86	95
128.0	3.0	2.93	98

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D240/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
130.0 133.0 136.0	3.0 3.0 3.0	1.95 2.95 3.0	65 98 100

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/12

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 - 6.5m	bph/pgh	2		minor carbonate		97	70	
6.5 - 39.8	bh	2		minor clay, carbonate		100	67	minor broken core 11.06 - 11.20, 23.50 - 23.6, 24.1 - 24.35.
39.8 - 77.4	bh/pgh/gh	2		minor carbonate		99	59	minor brecciated core @ 64.3 broken ground 48.0 - 48.4 56.15 - 56.3 56.6 - 57.0 65.3 - 65.5
77.4 - 107.0	marker/ banded gh/ bh/ pgh/gh	2		minor clay; chlorite @ 87m pyrite/ pyrrhotite @ 103m.	79m: 45° 82m 35°	99	39	broken core: 87.2 - 87.4 103.6 - 104.0 106.5 - 107.0 Brecciated core: 87.85, 88.0. 102.56 ⁺ core is brecciated and weakly leached.
107.0 - 136.0	marker/banded gh/bfb/ad	4		minor clay	113m; 32° 116m; 40°	98	59	broken core: 110 - 110.3, 117.56 - 119.0; 121.6 - 121.85 127.3 -127.5 Puggy broken core @ 118.6 ? Fault

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm = \frac{\text{length core} > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size. 0 - 136.0m (36mms. dia.)

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D240/12

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D6135	2	3	1.0	1.0	0.01	< 0.01	
6	3	4	"	"	1.14	0.05	
7	4	5	"	"	0.92	0.06	
8	5	6	"	"	0.19	< 0.01	
9	6	7	"	"	< 0.01	< 0.01	
D6140	52	53	"	"	0.16	< 0.01	
41	53	54	"	"	< 0.01	< 0.01	
42	65	66	"	"	0.01	< 0.01	
43	66	67	"	"	< 0.01	< 0.01	
44	67	68	"	"	0.64	0.01	
45	68	69	"	"	1.64	0.03	
46	69	70	"	"	1.14	0.04	
47	70	71	"	"	0.98	0.05	
48	71	72	"	"	0.73	0.03	
49	72	73	"	"	0.69	0.03	
50	73	74	"	"	0.59	0.02	Upper C lens
51	74	75	"	"	0.38	0.01	67 - 76m
2	75	76	"	"	0.65	0.03	9m @ 0.83% WO ₃
3	76	77	"	0.64	0.07	< 0.01	
4	77	78	"	0.80	< 0.01	< 0.01	
5	78	79	"	1.00	< 0.01	< 0.01	
6	79	80	"	1.00	< 0.01	< 0.01	
7	80	81	"	"	< 0.01	< 0.01	
8	81	82	"	"	0.74	0.02	
9	82	83	"	"	0.72	0.02	
60	83	84	"	0.80	1.18	0.03	Lower C lens
1	84	85	"	1.00	1.30	0.03	81 - 87, 6m @ 0.84% WO ₃
2	85	86	"	"	0.64	0.01	
3	86	87	"	"	0.44	< 0.01	
4	87	88	"	"	< 0.01	< 0.01	
5	88	89	"	"	< 0.01	< 0.01	
6	89	90	"	"	0.15	0.01	
7	90	91	"	"	1.48	0.04	
8	91	92	"	"	< 0.01	< 0.01	
9	92	93	"	"	< 0.01	< 0.01	
70	93	94	"	"	< 0.01	< 0.01	
1	94	95	"	"	< 0.01	< 0.01	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - D 240/12

ASSAY DATA

B.D.H. No. D 240/12

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo		
D6172	95	96	1.0	1.0	0.18	0.01		
3	96	97	"	"	0.01	0.01		
4	97	98	"	"	0.44	0.02		
5	98	99	"	"	1.64	0.04		
6	99	100	"	"	1.99	0.06		
7	100	101	"	"	3.15	0.08		
8	101	102	"	"	2.73	0.11		
9	102	103	"	"	3.13	0.13		Upper C lens
80	103	104	"	"	2.94	0.19		97 - 108m,
1	104	105	"	"	0.93	0.03		11m @ 1.89% WO ₃
2	105	106	"	"	0.85	0.03		
3	106	107	"	"	2.23	0.08		
4	107	108	"	"	0.81	0.04		
5	108	109	"	"	<0.01	<0.01		
6	109	110	"	"	<0.01	<0.01		
7	110	111	"	"	0.31	0.03		
8	111	112	"	"	0.68	0.02		Lower C lens
9	112	113	"	"	0.76	0.03		110 - 113,
90	113	114	"	"	0.04	0.01		3m @ 0.58% WO ₃
1	114	115	"	"	<0.01	0.01		
2	115	116	"	"	0.07	0.01		
3	116	117	"	"	1.47	0.08		
4	117	118	"	"	<0.01	<0.01		
5	118	119	"	"	<0.01	<0.01		
6	119	120	"	"	<0.01	<0.01		
7	120	121	"	"	<0.01	<0.01		
8	121	122	"	"	<0.01	<0.01		
9	122	123	"	"	<0.01	<0.01		
200	123	124	"	"	<0.01	<0.01		
1	124	125	"	"	<0.01	<0.01		
2	125	126	"	"	<0.01	<0.01		
3	126	127	"	"	<0.01	<0.01		
4	127	128	"	"	<0.01	<0.01		
5	128	129	"	"	0.11	0.01		
6	129	130	"	"	0.85	0.03		
7	130	131	"	"	0.40	0.01		
8	131	132	"	"	0.48	0.02		
9	132	133	"	"	0.44	0.02		
10	133	134	"	"	0.61	0.03		
D6211	134	135	"	"	0.27	0.01		

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No.D 240/12

0 - 2.50

DISTURBED BIOTITE PYROXENE HORNFELS

A pale green - grey barren bph.

2.50 - 6.70

PYROXENE GROSSULAR HORNFELS

A pale green pyroxene and pink grossularite rich hornfels with an interval of gh containing finely disseminated scheelite mineralisation 2.50 - 3.80. The remaining intervals contain weak scheelite mineralisation.

6.70 - 41.33

BIOTITE HORNFELS

A black, barren massive biotite hornfels having a fine grained texture throughout except:

6.70 - 9.0 ("fragmental")

28.57 - 29.4 and

30.0 - 33.0 ("blotchy")

41.33 - 67.5

PYROXENE GARNET HORNFELS

Typical pgh to 46m, having subrounded calcite ovoids, occasionally rimmed in grossularite, surrounded by a pyroxene rich groundmass.

Below 46m the pgh has a "blotchy" appearance and contains weak scheelite mineralisation throughout; except in the interval 53.0 - 53.4 which contains abundant fine grained disseminated scheelite. Andradite garnet development is noted here.

Possible minor fault at 64.3m.

Basic dyke (?) at 53.93 - 54.32.

The lower pgh contact is sharp.

67.5 - 76.1

MASSIVE GARNET HORNFELS

A massive grey andradite garnet skarn containing high grade finely disseminated scheelite to 75m. Beyond this point the core is enriched in pyroxene and the mineralisation grade decreases, core quality is good

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D240/12

76.1 - 81.8

MARBLE MARKER

Consisting of:

1. black barren bh - 76.1 - 78.87
2. white barren ch - 78.87 - 81.1

Bedding : 79m 45° LAOC.

81.1 - 86.90

BANDED GARNET HORNFELS

A bedded andradite garnet hornfels containing medium to high grade finely disseminated scheelite throughout.

Bedding: 82.1m 35° LAOC

86.90 - 88.5

BIOTITE HORNFELS

A black barren bh, riddled with carbonate veins at 87.8; brecciated at 87.8 and 88.04, with broken ground 88.2 - 88.3.
Fault.

88.5 - 97.7

PYROXENE GARNET HORNFELS

This interval is not typically textured pgh. Between 88.5 - 89.5 the rock has some (relict) ovoids, surrounded by a black biotite rich groundmass. Beyond 89.5m the rock has a disturbed texture with pale green ph, green elongate needles of epidote ^{and} and minor andradite development.

Coarse scheelite occurs at 90.19
90.60
90.94
92.50
97.0
97.80

Quartz veins are present at 96.8 and 97.0m.

The lower most contact with the massive gh is sharp.

97.70 - 107.34

MASSIVE GARNET HORNFELS

A massive medium grained andradite garnet hornfels containing finely disseminated high grade scheelite mineralisation throughout.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/12

The core is enriched in pyroxene from 105.20m, with an apparent decrease in scheelite grade.

Minor rubble: 103.6 - 104.0

Brecciated and weakly leached core: 102.56 - 102.66.

107.34 - 110.70

MARBLE MARKER

Consisting of:

1. Very weakly mineralised green/pink pyroxene grossular hornfels: 107.34 - 108.68.
2. Black barren broken bh: 108.68 - 110.0.
3. Barren pyroxene grossular hornfels: 110.0 - 110.7.

110.70 - 117.10

BANDED GARNET HORNFELS

A bedded sequence of white ch, green ph, minor black, disturbed bh beds and significant intervals of andradite garnet hornfels containing medium grade disseminated scheelite:

110.7 - 111.65

112.35 - 113.0

115.75 - 116.95

The ch/ph/bh sections are very weakly mineralised.

Bedding: 113m 32° LAOC

116m 40° LAOC

117.10 - 118.85

BROKEN BIOTITE HORNFELS

A black broken bh. Puggy brecciated core at 118.70. Fault.

118.85 - 128.05

UNMINERALISED BANDED FOOTWALL BEDS

Dominantly a white ch with minor interbeds (less than 2 cm) of black bh, green ph and minor grossularite. Almost barren.

118.85 - 135.10

MINERALISED BANDED FOOTWALL BEDS

An interbedded sequence of green ph, minor black bh and grey garnet hornfels containing weak disseminated scheelite. Pyrite at 134.35.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/12

135.10 - 136.0
EOH

GRANITE

A fine-medium grained white-pink adamellite.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/12

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			HOLE No.
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo		
6177	3.15		6572	2.91		6573	3.15		6574	3.21		D 240/12	
6189	0.76		6602	10.82		6603	0.98		6604	1.00		"	
6206	0.85		6575	0.92		6576	1.00		6577	0.86		"	
6210	0.61		6578	0.60		6579	0.68		6580	0.68		"	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 240/11

PLANNING

Proposer: M. Danielson

Depth: 125m

Location: K9/Q9 -150m R.L.

Purpose of hole: C lens oreblocking

Co-ordinates: 220 240 E 563 950

Inclination: -83°

Bearing: 360° **Grid**

Target: E

Approved by: M.C. Rogers

N

Magnetic:

Target Depth:

N

Date: 1/7/77

SURVEY

Survey Co-ords: - E -

Survey bearing: 353° 50' **Grid**

Surveyed in by: -

Actual Co-ords: 220 239.86 E 563 943.82

R.L. of Collar: R-147.0

Picked up by: R.J.H.

N

Magnetic:

Date:

N

Inclination of Hole: -82° 50'

Date: 29/8/77

SUMMARY

Logged by: M.J. DANIELSON

Results: Upper C lens: 45 - 67m, 22m @ 1.30% WO₃
Lower C lens: 71- 83m, 12m @ 0.85% WO₃

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 15/8/77

Date terminated: 24/8/77

Casing: Size: -

Depth:

Core: Size: 46TT

Depth: 128.3

Wedge Runoff:

Wedge placed: Nil

Proposed by:

Reason:

Depth:

Approved by:

Extension: Nil

Reason for termination: Hole entered granite

Condition of hole on completion:

Final depth: 128.3

Casing:

Cemented: -

Bore hole survey: Surveyed to 128.3m

Water: Normal water return throughout

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/11

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.9	2.9	2.9	100
5.0	2.1	2.0	95
7.0	2.0	2.0	100
10.0	3.0	3.0	100
13.0	3.0	3.0	100
16.0	3.0	3.0	100
19.0	3.0	3.0	100
21.0	2.0	2.0	100
23.8	2.8	2.85	102
26.8	3.0	3.0	100
29.8	3.0	3.0	100
32.8	3.0	3.0	100
35.8	3.0	3.0	100
38.8	3.0	3.0	100
41.8	3.0	3.0	100
44.8	3.0	3.0	100
47.8	3.0	3.0	100
50.8	3.0	3.0	100
53.8	3.0	3.0	100
56.8	3.0	3.0	100
59.8	3.0	3.0	100
62.8	3.0	2.7	90
65.8	3.0	3.0	100
66.8	1.0	1.0	100
69.6	2.8	2.7	96
71.2	1.6	1.6	100
73.5	2.3	2.25	87
76.8	3.3	3.4	103
79.7	2.9	2.8	97
82.7	3.0	3.1	103
85.7	3.0	2.9	97
89.0	3.3	3.3	100
92.0	3.0	3.0	100
95.0	3.0	3.0	100
97.0	2.0	2.0	100
98.3	1.3	1.4	108
100.0	1.7	1.7	100
102.0	2.0	2.0	100
104.0	2.0	1.8	90
107.0	3.0	3.0	100
110.0	3.0	3.0	100
112.0	2.0	2.0	100
115.0	3.0	3.0	100
118.0	3.0	3.0	100
121.0	3.0	3.0	100
124.0	3.0	3.0	100
128.3	4.3	4.3	100

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D240/11

Survey method: Multishot camera

Final depth : 128.30m

Casing depth : 1.0m

Depth surveyed to: 128.3m

Date surveyed: 24/8/77

Surveyed by : L. DENBY

Checked by : G.L. BUCKLAND

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	W
9	342°	332°	6° 15'	-83° 45'	8.94	0.86	0.46
36	312°	302°	7° 45'	-82° 15'	35.72	3.23	2.86
54	310°	300°	8°	-82°	53.54	4.50	5.01
72	306° 10'	296° 10'	9°	-81°	71.34	5.76	7.40
90	306°	296°	9° 45'	-80° 15'	89.09	7.04	10.08
108	303° 10'	293° 10'	10°	-80°	106.81	8.34	12.91
128.3	301°	291°	10°	-80°	127.10	9.65	16.23

REMARKS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/11

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 10.0	B lens	5		clay minor carbonate		99	87	
10.0 - 29.8		4		clay		100	81	broken ground 15.3 - 15.8m 19.6 - 21.0m
possible fault					18.2 - 18.5 - small clay recemented breccia 24m: 60°			
29.8 - 47.8	pgh	5		clay carbonate		100	72	broken ground 41 - 42m
possible fault					29.7 - 30.5 intricate carbonate veining			
47.8 - 62.8	gh	3		clay rock flour		98	87	
possible fault					62.4 - 62.8 some lost core and what remains is leached and puggy.			

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm \frac{\text{length core} > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size.

46TT = 36 mm dia.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/11

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)
62.8 82.7	gh	8		clay	70m: 50° 70m: 50°	99	67	broken ground 66.5 - 66.7
82.7 98.3 <u>possible faults</u>	bah	10		clay	89m: 45°	100	71	
		(1)	85.4 -	86.3	clay recemented breccia			
		(2)	92.4 -	93.2	clay recemented breccia			
		(3)	95.0 -	95.5	clay recemented breccia			
98.3 124.0	bah	6		clay	107m: 50° 117m: 65°	99	80	broken ground 110 - 112m
			110.5 -	111.0m				
124.0 128.3	granite	3		---		100	93	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}} \%$
- Core size.

GEOPEKO LIMITED -

ASSAY DATA

D.D.H. No. D 240/11

Sample No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 6035	1	2	1.0	1.0	< 0.01	< 0.01	
6	2	3	"	"	< 0.01	< 0.01	
7	3	4	"	"	0.68	0.02	
8	4	5	"	0.9	1.27	0.06	
9	5	6	"	1.0	0.18	0.02	
40	6	7	"	"	0.22	0.02	
D 6041	7	8	"	"	< 0.01	0.01	
D 6042	37	38	1.0	1.0	0.17	< 0.01	
3	38	39	"	"	< 0.01	< 0.01	
4	39	40	"	"	0.04	< 0.01	
5	40	41	"	"	0.22	0.01	
6	41	42	"	"	0.01	< 0.01	
7	42	43	"	"	< 0.01	< 0.01	
8	43	44	"	"	< 0.01	< 0.01	
9	44	45	"	"	< 0.01	< 0.01	
50	45	46	"	"	0.88	0.03	
1	46	47	"	"	1.45	0.04	
2	47	48	"	"	1.37	0.05	
3	48	49	"	"	4.33	0.16	
4	49	50	"	"	1.78	0.08	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED -

ASSAY DATA

D.D.H. No. D 240/11

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo		
5	50	51	1.0	1.0	1.38	0.07		
6	51	52	"	"	0.83	0.05		
7	52	53	"	"	1.74	0.08		
8	53	54	"	"	1.78	0.09		
9	54	55	"	"	0.69	0.04		
60	55	56	"	"	0.81	0.04		Upper C lens 45 - 67 metres 22 metres @ 1.30% WO ₃ 0.06% MO
1	56	57	"	"	0.76	0.04		
2	57	58	"	"	0.54	0.03		
3	58	59	"	"	0.72	0.04		
4	59	60	"	"	1.31	0.07		
5	60	61	"	"	1.76	0.08		
6	61	62	"	"	1.26	0.07		
7	62	63	"	0.8	0.65	0.02		
8	63	64	"	1.0	1.24	0.06		
9	64	65	"	"	1.16	0.06		
70	65	66	"	"	1.74	0.09		
1	66	67	"	"	0.41	0.02		
2	67	68	"	"	<0.01	<0.01		
3	68	69	"	"	<0.01	<0.01		
4	69	70	"	"	<0.01	<0.01		
5	70	71	"	"	<0.01	<0.01		
6	71	72	1.0	1.0	0.45	0.02		
7	72	73	"	"	2.86	0.11		
8	73	74	"	"	1.26	0.05		
9	74	75	"	"	0.26	<0.01		Lower C lens 71 - 83m, 12m @ 0.85% WO ₃ 0.03% MO
80	75	76	"	"	0.64	0.02		
1	76	77	"	"	1.58	0.07		
2	77	78	"	"	0.99	0.03		
3	78	79	"	"	0.12	<0.01		
4	79	80	"	"	0.46	0.01		
5	80	81	"	"	0.58	0.01		
6	81	82	"	"	0.63	0.02		
7	82	83	"	"	0.48	0.01		
8	83	84	"	"	0.21	<0.01		
D 6089	84	85	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/11

0.0 - 11.0

B LENS

Unit is dominantly a fine grained pale green pyroxene hornfels.

Minor andradite and grossular garnet developed between 3.0 - 6.0m and this section contains high grade finely disseminated scheelite.

11.0 - 30.0

BIOTITE HORNFELS

Fine grained barren grey brown biotite hornfels.

18.2 - 18.5 possible fault.

30.0 - 46.5

PYROXENE GARNET HORNFELS

Upper contact of this unit between 29.7 - 30.5m is broken ground with minor carbonate veining and may represent fault zone.

The Upper part of this unit to 37.3m is very biotite rich in the matrix but strongly podded. Below 37.3m matrix is more pyroxene and grossular rich and contains minor mostly suboregrade mineralisation.

46.5 - 66.3

MASSIVE GARNET HORNFELS

Massive medium grained andradite skarn. High grade finely disseminated scheelite.

Below 62.8m unit is weakly bedded.

62.5 - 62.8m is lost core and minor core rubble recovered in this zone maybe fault.

66.3 - 71.5

MARBLE MARKER

Unit is dominantly barren white ch. Minor bh and very minor grossular garnet.

71.5 - 85.1

BANDED GARNET HORNFELS

Typical banded andradite garnet hornfels.

Mineralisation is medium grade finely disseminated to 80m but is more patchy below 80m and no mineralisation below 83.5m.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D240/11

85.1 - 99.2 BANDED BIOTITE ACTINOLITE HORNFELS

Barren interbedded grey and brown bh and ah
Several zones in this section maybe faults - see structural
page.

95.6 - 97.5 Aplite

99.2 - 100.00 LOWER METAVOLCANICS

Pale grey barren massive biotite flecked
metavolcanics.

100.0 - 122.9 BANDED BIOTITE ACTINOLITE HORNFELS

Similar to the unit described above but also
containing minor brown grossular garnet.

Minor disseminated scheelite 112.2 - 112.4m.

Below 112m unit shows signs of brecciation probably
due to aplites and approaching granite contact.

122.9 - 128.3 GRANITE

E.O.H.

Pale pink fine to medium grained barren granite.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/11

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			HOLE No.
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo		
6038	1.27		6677	1.04		6678	1.39		6679	1.36		D 240/11	
6050	0.88		6674	1.24		6675	1.08		6676	1.31		"	
6062	0.54		6569	0.47		6570	0.63		6571	0.58		"	
6070	1.74		6605	1.59		6606	1.61		6607	1.54		"	
6081	1.58		6659	1.51		6660	1.56		6661	1.42		"	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D240/10

PLANNING

Proposer: M. Danielson Depth: 150m

Location: M14, -150m R.L.

Purpose of hole: C lens oreblocking and test rock types
to -280m R.L.

Co-ordinates: 220 240E E 563 945

Inclination: -59°

Bearing 360° Grid

Target: E

Approved by: M.C. ROGERS

N
Magnetic:
Target Depth:

N
Date: 1/6/77

SURVEY

Survey Co-ords: - E -

Survey bearing: 2' 00' Grid

Surveyed in by: -

Actual Co-ords: 220 239.90 E 563 944.34

R.L. of Collar: F - 147.00

Picked up by: R.J.H.

N
Magnetic:
Date:

N
Inclination of Hole: -59° 10'
Date: 13/7/77

SUMMARY

Logged by: M. DANIELSON

Results: Upper C lens:
53 - 64m, 11m @ 1.14% WO₃

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 11/7/77

Date terminated: 15/8/77

Casing: Size: BX

Depth: 1m

Core: Size: 46TT

Depth: 147.6

Wedge Runoff:

Wedge placed: Nil

Proposed by:

Reason:

Depth:
Approved by:

Extension: Nil

Reason for termination: Hole in granite

Condition of hole on completion:

Final depth: 147.6m

Casing:

Cemented:

Bore hole survey: Multishot to 147.6m

Water: -

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D240/10

Survey method: Multishot camera

Final depth : 147.6

Casing depth : 1m

Depth surveyed to: 147.6

Date surveyed: 15/8/77

Surveyed by : L. Denby

Checked by : M.J.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	W
6	004	354	-29.75	-60.25	5.21	2.96	0.31
21	000	350	-29.75	-60.25	18.23	10.29	1.60
45	359	349	-28.75	-61.25	39.27	21.64	3.75
69	357	347	-29	-61	60.29	32.96	6.21
81	358	348	-29	-61	70.80	38.63	7.46
105	356	346	-28	-62	91.91	49.71	10.12
129	355.5	345.5	-27.75	-62.25	113.13	60.60	12.88
147.6	356	346	-28.25	-61.75	129.51	69.14	15.00

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D240/10

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.9	2.9	2.8	97
6.4	3.5	3.5	100
9.4	3.0	2.9	97
11.2	1.8	1.8	100
15.0	3.8	3.8	100
18.5	3.5	3.45	99
19.6	1.1	1.1	100
23.3	3.7	3.7	100
27.6	4.3	4.3	100
30.6	3.0	3.0	100
35.4	4.8	4/6	96
38.4	3.0	3.0	100
41.4	3.0	3.0	100
44.4	3.0	3.0	100
47.4	3.0	3.0	100
50.4	3.0	3.0	100
53.4	3.0	3.0	100
56.4	3.0	3.0	100
59.4	3.0	3.0	100
62.4	3.0	3.0	100
65.0	2.6	2.5	96
67.0	2.0	2.0	100
70.0	3.0	3.0	100
72.0	2.0	2.0	100
73.4	1.4	1.4	100
74.3	0.9	0.75	83
75.0	0.7	0.7	100
75.2	0.2	0.2	100
76.3	1.1	1.1	100
78.5	2.2	1.9	86
78.8	0.3	0.25	83
81.8	3.0	0.8	27
84.8	3.0	1.6	53
87.8	3.0	0.9	30
90.8	3.0	1.9	63
93.8	3.0	3.0	100
96.8	3.0	2.1	70
99.8	3.0	3.0	100
102.8	3.0	0.5	17
104.8	2.0	0.3	15
107.8	3.0	2.90	97
110.8	3.0	3.0	100
112.2	1.4	1.5	107
112.6	0.4	0.4	100

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D240/10

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
114.6	2.0	1.9	95
117.6	3.0	3.0	100
120.6	3.0	3.0	100
123.6	3.0	3.0	100
126.6	3.0	3.0	100
129.6	3.0	3.0	100
132.6	3.0	3.0	100
135.6	3.0	3.0	100
138.6	3.0	3.0	100
141.6	3.0	3.0	100
144.6	3.0	3.0	100
147.6	3.0	3.0	100

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D240/10

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 - 15.0	B lens	5		clay		99	81	
15.0 - 35.4	bh	5		clay		99	85	
35.4 - 53.4	pgh	4		clay		100	75	
<u>Fault</u>	46.4 - 48.6	Core is mostly rubble with some clay recemented breccia.						
53.4 - 65.0	gh	3		clay		99	94	
65.0 - 78.5	bh	10		clay		97	52	
Possible Fault	65.0 - 65.5 65.6 - 67.0	core is rubble clay recemented breccia with minor intricate carbonate veining.						
								Broken ground 75.0 - 75.6m
78.5 - 90.8	pgh	?		clay		44	16	
	Much of this core contains minor fractures and would have little structural strength.							
90.8 - 112.2	pgh/bfb	5		clay		76	62	
	99 - 105m	+ 20			105m : 55° 111m : 60°			
<u>Probable Faults</u>	(1)	93.8 - 96.8		clay recemented breccia				
	(2)	98.5 - 98.8		" "	" "			
	(3)	99.8 - 104.8		significant lost core				
112.2 - 123.6	bh	7		clay		99	65	120.8 - 121.2 weakly leached
	120 - 127m	+15						mineralised
123.6 - 147.6	granite	6		clay		100	78	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) = $\frac{\text{length core } > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size.

46 TT - 36 mm dia.

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.M. No. D 240/10

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo		
D5889	0	1	1.0	0.9	<0.01	<0.01		
90	1	2	"	1.0	0.27	0.01		
1	2	3	"	"	0.02	<0.01		
2	3	4	"	"	2.22	0.10		
3	4	5	"	"	0.04	<0.01		
4	5	6	"	"	0.02	<0.01		
5	6	7	"	"	0.15	<0.01		
6	7	8	"	"	0.01	<0.01		
7	8	9	"	"	0.66	0.02		
8	9	10	"	"	0.02	<0.01		
D5899	10	11	"	"	<0.01	<0.01		
D5900	40.5	41.5	1.0	1.0	<0.01	<0.01		
D5971	50	51	1.0	1.0	<0.01	<0.01		
2	51	52	"	"	0.42	0.02		
3	52	53	"	"	0.01	<0.01		
4	53	54	"	"	0.84	0.04		
5	54	55	"	"	0.24	0.01		
6	55	56	"	"	1.66	0.06		
D5977	56	57	"	"	1.68	0.09		
D5991	57	58	"	"	2.74	0.11		
2	58	59	1.0	1.0	1.44	0.07		
3	59	60	"	"	1.34	0.07		
4	60	61	"	"	1.55	0.06		
5	61	62	"	"	0.50	0.02		
6	62	63	"	"	0.01	<0.01		
7	63	64	"	"	0.57	0.02		
D5998	64	65	"	"	<0.01	<0.01		
D6025	82	85	3.0	1.66	<0.01	<0.01		
6	85	88	3.0	0.90	0.01	<0.01		
7	88	89	1.0	1.0	3.40	0.11		
8	89	91	2.0	0.95	0.31	0.01		
9	91	92	1.0	1.0	0.01	<0.01		
30	92	93	1.0	"	<0.01	<0.01		
1	93	94	1.0	"	0.40	0.01		
2	94	95	1.0	"	<0.01	<0.01		
3	95	97	2.0	1.1	0.67	0.02		
4	97	98	1.0	1.0	0.01	<0.01		

Upper C lens
53 - 64m,
11m @ 1.14% WO₃
0.05% Mo

SPECIFIC GRAVITY

Determined by:

Depth (m):

Rock Type:

S.G. :

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D240/10

0.0 - 15.0m B LENS

Garnet pyroxene hornfels 0.0 - 10.0m

Very weakly mineralised pyroxene and grossular hornfels.
Minor carbonate.

Biotite pyroxene hornfels 10.0 - 15.0m

Dominantly a grey brown bh with minor green ph interbeds
occasionally containing minor sulphide.

15.0 - 36.5 BIOTITE HORNFELS

Barren grey brown fine grained bh.

36.5 - 54.7 PYROXENE GARNET HORNFELS

Typical pgh containing white angular carbonate pods up to
10cm dia.

Coarse scheelite at 41.0 - 41.05m

Mineralisation is very fine and sporadic and unit is
sub grade.

Fault 46.4 - 48.6,

Core is very broken in this interval. Some fine carbonate
veining and minor pyrite on some fracture surfaces.
48.2 - 48.6m rock fragments are recemented in a clay matrix.

54.7 - 65.0 GARNET HORNFELS

Medium to fine grained andradite garnet hornfels.

Unit is more pyroxene, grossular and carbonate rich
below 63.5m.

65.0 - 67.0 FAULT (?)

65.0 - 65.5m core is only rubble with montmorillonite on
fracture surfaces. 65.5 - 67.0m core is cracked and in
places appears as a clay recemented breccia. Rock type
in this interval is bh.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D 240/10
D.P.H. No. BH-375/6

67.0 - 75.6 BIOTITE HORNFELS

Barren fine grained grey biotite hornfels

Core is shattered between 75.0 - 75.6m but does not look like a fault.

75.6 - 99.8 PYROXENE GARNET HORNFELS

Pale green pyroxene hornfels matix containing white carbonate ovoids. Minor grossular garnet.

Weak, mostly suboregrade disseminated scheelite between 82 - 97.5m.

Core recovery between 78.8 - 90.8m was only 44m and between 99.8 - 104.8m was only 3.8 m.

Both of these zones probably correspond to Wedge Fault Zone.

99.8 - 112.2 BANDED FOOTWALL BEDS

Thinly interbedded bh, ph, ch and grossular garnet. Occasional speck of scheelite.

Contact with underlying bh unit appears stratigraphic. <

112.2 - 121.5 BIOTITE HORNFELS

Barren grey bh.

Broken ground 120 - 122m with some minor leaching.

121.5 - 147.6 GRANITE

E.O.H.

Barren medium to fine grained pink granite.

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/10

LAB.		K.I.S.		LAB. K.I.S. Check			LAB. AMDEL			LAB. A.C.S.L.			HOLE No.
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo		
5892	2.22		6751	3.72		6752	3.03		6753	2.65		D 240/10	
5974	0.84		6650	0.56		6651	0.58		6652	0.48		"	
5991	2.74		6668	2.09		6669	2.77		6670	2.46		"	
6027	3.40		6635	2.77		6636	3.45		6637	3.24		"	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D 240/9

PLANNING

Proposer: M.J. Danielsen.

Depth: 25m.

Location: -98m R.L.

Purpose of hole: B lens oreblocking.

Co-ordinates: 220 240 E 564 135 N

Inclination: +45° Magnetic

Bearing: 180° Grid Target depth: 25m.

Target: E N

Approved by: M.C. Rogers. Date: 1/7/75

SURVEY

Survey Co-ords: E N

Survey bearing: 181°30' Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220 240.3 E 564 135.5 N

R.L. of collar: -92.2 Inclination of hole: +45°00'

Picked up by R.J.H. Date: 11/7/75

SUMMARY

Logged by : M.J. Danielsen.

Results: No significant B lens intersection.

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 7.7.75

Date terminated: 11/7/75

Casing:	Size :	NIL		
	Depth :			
Core:	Size :	A.17		
	Depth :	23.47		

Wedge Runoff:

Wedge placed: Nil.

Depth:

Proposed by :

Approved by:

Reason:

Extension: Nil. Hole passed out of B lens

Reason for termination: sequence. Final depth: 23.47m.

Condition of hole on completion:

Casing : Nil.

Cemented : No.

Bore hole survey: Surveyed to 23.47m.

Water: Nil.

Comments on drilling conditions:

GROPEKO LIMITED - DOLPHIN MINE (K.I.)

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/9

Survey method : Multishot camera.
 Final depth : 23.47m.
 Casing depth : NIL.

Depth surveyed to : 23.47m.
 Date surveyed : 11/7/75
 Surveyed by R. Bogaart.
 Checked by G. Buckland.

DEPTH	Bearing		Inclination		True Vertical Depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		E	S
6.10	179°15'	170°15'	45°15'	+44°45'	+4.29	0.73	4.27
12.19	181°	172°	45°45'	+44°15'	+8.56	1.38	8.54
18.29	181°	172°	45°15'	+44°45'	+12.83	1.98	12.83
23.47m	181°	172°	45°	+45°	+16.50	2.49	16.46

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/9

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 - 12.80m	gph/ch	7		clay	1m:20° 5m:35° 7m:32°	94	54	
12.80 - 23.47m.	bh	10		clay, minor pyrite		99	49	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) $\pm = \frac{\text{length core} > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size. A.17 = 33mms. dia.

GEOPEKO LIMITED - King Island

CORE RECOVERY

D.D.H. No. D 240/9

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.66	3.66	3.10	85
6.71	3.05	3.00	98
9.75	3.04	2.90	95
12.80	3.05	3.0	98
14.33	1.53	1.53	100
17.37	3.04	2.04	100
20.42	3.05	3.05	100
23.47	3.04	2.90	95
E.O.H.			

GEOPEKO LIMITED - DOLPHIN MINE (K.I.)

ASSAY DATA

D.D.H. No. D 240/9

SAMPLE No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 4035	0	1	1.0	0.95	0.09	<0.01	
6	1	2	"	0.90	0.06	<0.01	
7	2	3	"	0.86	1.10	0.04	
8	3	4	"	0.72	0.19	0.01	
9	4	5	"	1.0	0.11	<0.01	
40	5	6	"	"	0.04	<0.01	
1	6	7	"	"	<0.01	<0.01	
D 4042	7	8	"	"	0.10	0.01	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/9

0 - 12.80m

B LENS

0 - 1.0m Garnet pyroxene hornfels

Weak disseminated scheelite in a fine grained pyroxene rich skarn.

1.0 - 1.9m. Marble

Barren grey ch.

1.9 - 6.2m. Garnet pyroxene hornfels

Weak disseminated scheelite in a fine grained pyroxene rich skarn.

6.2 - 12.8m. Pyroxene hornfels

Barren pale green fine grained ph.

12.80 - 23.47m

BIOTITE HORNFELS

Fine grained grey brown barren bh. Very occasional green interbeds of ph.

23.47m E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D 240/8

PLANNING

Proposer: M.J. Danielson.
Location: Q16, -100m. R.L.

Depth: 60m.

Purpose of hole: Exploration of B lens.

Co-ordinates: 220 240 E 564 138 N
Inclination: +45° Magnetic
Bearing: 360° Grid Target depth:
Target: E N
Approved by: M.C. Rogers. Date: 20/6/75

SURVEY

Survey Co-ords: E N
Survey bearing: 358°50' Grid Magnetic
Surveyed in by: 7 Date:
Actual Co-ords: 220 240.7 E 564 139.7 N
R.L. of collar: -94.1 Inclination of hole: +44°20'
Picked up by :R.J.H. Date: 7.7.75

SUMMARY

Logged by : M.J. Danielson.
Results: B lens: 1.0 - 22m, 21m @ 0.89% WO₃
0.05% Mo.

DRILLING

Driller/Contractor: A.D.D.
Date commenced: 20/6/75 Date terminated: 7/7/75

Casing: Size :	Nil.		
Depth :			
Core: Size :	A.17		
Depth :	52.53		

Wedge Runoff:

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

Extension: Nil.

Reason for termination: Hole passed out of B lens sequence. Final depth: 52.53m

Condition of hole on completion:

Casing : Nil.

Cemented : No.

Bore hole survey: Surveyed to 50.69m.

Water: Nil.

Comments on drilling conditions:

GEOPEKO LIMITED - DOLPHIN MINE (K.I.)

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/8

Survey method : Multishot camera.

Final depth : 52.52m.

Casing depth : Nil.

Depth surveyed to : 50.29m.

Date surveyed : 4/7/75

Surveyed by : G.B + R.B.

Checked by : G. Buckland.

DEPTH	Bearing		Inclination		True Vertical Depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		E	N
15.24	359°	350°	+46°	+44°	+10.56	2.25	10.75
30.48	358°	349°	+47°	+43°	+21.08	4.35	21.57
45.72	357°	348°	+47°	+43°	+31.53	6.50	32.46
50.69	357°	348°	+47°	+43°	+34.65	7.18	35.64

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/8

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 - 20.72	ch gph	5		clay carbonate		97	73	
20.72 - 27.03	gph	6		clay		96	67	
27.03 - 30.07	Fault?			clay carbonate		100	31	
30.07 - 52.53	ph * bh/ph	6		clay	40m:15° 44m:10°	100	69	

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designation) = $\frac{\text{length core} > 10 \text{ cms}}{\text{length drilled}} \%$
- Core size. A.17 33mms. dia.

GEOPEKO LIMITED - King Island

CORE RECOVERY

D.D.H. No. D 240/8

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.59	2.59	2.59	100
5.64	3.05	2.91	95
11.73	6.09	5.80	95
14.63	2.90	2.90	100
16.00	1.37	1.12	82
17.68	1.68	1.68	100
20.72	3.04	3.04	100
23.87	3.15	2.94	93
27.03	3.16	3.12	99
30.07	3.04	3.04	100
33.12	3.05	3.05	100
36.17	3.05	3.05	100
39.22	3.05	3.05	100
42.47	3.05	3.05	100
45.31	3.04	3.04	100
46.43	1.12	1.12	100
49.48	3.05	3.05	100
52.53	3.05	3.05	100
E.O.H.			

GEOPEKO LIMITED - DOLPHIN MINE (K.I.)

ASSAY DATA

D.D.H. No.D 240/8

SAMPLE		DEPTH (METRES)			ELEMENTS		COMMENTS
No.	From	To	Length	Length Recovered	WO ₃	Mo	
D 4008	0	1	1.0	1.0	0.04	0.01	
9	1	2	"	"	0.28	0.02	
10	2	3	"	"	0.54	0.03	
1	3	4	"	0.90	0.28	0.02	B lens
2	4	5	"	1.0	0.19	0.02	
3	5	6	"	"	0.61	0.04	1 - 22m,
4	6	7	"	"	0.59	0.04	
5	7	8	"	"	0.40	0.03	
6	8	9	"	0.91	0.82	0.05	21m @
7	9	10	"	0.87	0.49	0.03	0.89% WO ₃
8	10	11	"	0.94 ⁹⁴	0.84	0.05	0.05% Mo.
9	11	12	"	1.0	1.58	0.08	
20	12	13	"	"	0.66	0.04	NOTE:
1	13	14	"	"	1.44	0.08	(sample
2	14	15	"	"	0.52	0.03	D 4027 was
3	15	16	"	0.80	0.56	0.03	written down
4	16	17	"	1.0	2.30	0.12	to 4.0% WO ₃
5	17 ¹	18	"	"	0.39	0.03	0.20% Mo).
6	18	19	"	"	0.38	0.03	
7	19	20	"	"	17.9	1.08	
8	20	21	"	"	0.79	0.04	
9	21	22	"	"	1.08	0.06	
4030	22	23	"	0.78	0.06	0.01	
1	23	24	"	1.0	0.13	0.01	
2	24	25	"	"	0.07	0.01	
3	25	26	"	"	0.79	0.04	
D 4034	26	27	1.0	1.0	0.34	0.03	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/8

LAB. K.I.S.			LAB. K.I.S.			LAB. Amdel			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D4009	0.28	0.02	D4499	0.30		D4500	0.38		D4501	0.36	
18	0.84	0.05	502	0.84		03	1.01		04	0.92	
27	17.9	1.08	05	18.70		06	19.55		07	19.60	
D4034	0.34	0.03	D4508	0.03		D4509	0.16		D4510	0.22	

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/8

0 - 48.0m

B LENS

0 - 1.40m Marble

Barren grey ch.

1.40 - 27.03m. Garnet pyroxene hornfels

Fine grained grossular and andradite garnet pyroxene rich skarn. Variable disseminated scheelite throughout. Coarse scheelite 19.5 - 19.7. Core becomes more pyroxene rich with less mineralization below 20m.

27.03 - 27.40m. Fault (?)

Leached core with abundant carbonate veining.

27.40 - 42.50m. Pyroxene hornfels

Barren green ph. Bedding 40m 15° L.A.O.C.

42.50 - 48.0m. Biotite pyroxene hornfels

Interbedded barren green and black hornfels. Bedding is at a shallow angle ($\approx 15^\circ$) to L.A.O.C.

48.0 - 48.6m

APLITE

48.6 - 52.53m

BIOTITE HORNFELS

Barren grey purple bh.

52.53m. E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D 240/7

PLANNING

Proposer: M.J. Danielson.

Depth: 75m.

Location: -98m R.L.

Purpose of hole: C lens oreblocking and locate Northern Boundary Fault.

Co-ordinates: 220240 E 564138 N

Inclination: -48

Magnetic

Bearing: 360°

Grid

Target depth:

Target: E

N

Approved by: M.C. Rogers.

Date: 1/6/75

SURVEY

Survey Co-ords: E

N

Survey bearing: 02°10' Grid

Magnetic

Surveyed in by:

Date:

Actual Co-ords: 220239.5 E 564137.8

N

R.L. of collar: -97.1m

Inclination of hole: -48°30'

Picked up by : R.J.H.

Date: 21/6/75

SUMMARY

Logged by : M.J. Danielson.

Results: B lens: 11 - 14m, 3m @ 0.37% WO₃
C lens: 48 - 60m, 12m @ 1.55% WO₃
67 - 72m, 5m @ 1.48% WO₃

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 6/6/75

Date terminated: 19/6/75

Casing: Size : BX
Depth : 1.52

Core: Size :	NQ	BQ	
Depth :	1.52	77.49	

Wedge Runoff:

Wedge placed: NIL

Depth:

Proposed by :

Approved by:

Reason:

Extension: NIL.

Reason for termination: Hole passed into quartzite. Final depth: 77.49m.

Condition of hole on completion:

Casing : 1.52 BX remains.

Cemented : Yes.

Bore hole survey: Surveyed to 72.54m.

Water: NIL.

Comments on drilling conditions:

GROPEKO LIMITED - Dolphin Mine

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/7

Survey method : Multishot camera.

Final depth : 77.49m

Casing depth : 1.52m

Depth surveyed to : 72.54m.

Date surveyed : 19/6/75

Surveyed by : R. Bogaart.

Checked by : G. Buckland.

DEPTH	Bearing		Inclination		True Vertical Depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		W	N
15.24	002°	353°	41°	49°	11.41	0.74	10.07
30.48	359°	350°	41°	49°	22.86	2.21	20.02
45.72	358°	349°	40°15'	49°45'	34.45	4.03	29.74
60.96	357°	348°	40°	50°	46.11	5.99	39.36
72.54	358°	349°	40°	50°	54.99	7.43	46.61

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/7

Depth Interval (metres)	Rock Type	Fractures/m.	Joint Angle (w.r.t. L.A.O.C.)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 14.02	B lens	5		clay carbonate.	3m:40°	100	63	Bad ground: 0 - 25 leached 7.3 - 8.3m.
14.02 - 38.40	bh	4		clay.		100	67	
38.40 - 50.60	pgh	7		clay		100	67	
50.60 - 72.84	gh, bph	5		clay 64-65: chlorite		99	71	clay recemented breccia 67 - 68.
72.84 - 77.49	bh, breccia	+20		clay		99	15	74m core is rubble.

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designator). = $\frac{\text{length core} > 10 \text{ cms}}{\text{length core}}$ %
- Core size. 0 - 1.52 NQ
 1.52 - 77.49 BQ

DRILLED

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/7

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	RECOVERED % CORE
0 - 3.96	3.96	3.96	100
5.18	1.22	1.22	100
8.23	3.05	2.85	93
10.46	2.23	2.18	98
10.87	.41	.41	100
11.27	.40	.65	162
14.02	2.75	2.72	99
17.14	3.12	3.12	100
20.19	3.05	3.05	100
23.16	2.97	3.05	102
26.21	3.05	3.05	100
29.31	3.10	3.10	100
32.31	3.00	3.00	100
35.36	3.05	3.05	100
38.40	3.04	3.05	100
41.45	3.05	3.05	100
44.50	3.05	2.96	97
47.55	3.05	3.05	100
50.60	3.05	3.05	100
53.74	3.04	2.90	95
56.69	3.05	3.05	100
59.74	3.05	3.05	100
62.79	3.05	2.95	97
65.85	3.06	3.05	100
68.88	3.03	3.03	100
71.78	2.90	2.90	100
72.84	1.06	1.15	108
74.83	1.99	2.00	100
77.49	2.66	2.60	98
E.O.H.			

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. D 240/7

SAMPLE No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 3819	5	6	1.0	1.0	0.23	< 0.01	
20	6	7	"	"	0.37	< 0.01	
1	7	8	"	0.90	0.07	< 0.01	
2	8	9	"	1.0	0.06	< 0.01	
3	9	10	"	"	< 0.01	< 0.01	
4	10	11	"	"	< 0.01	< 0.01	
5	11	12	"	"	0.46	< 0.01	B lens 11 - 14m, 3m @ 0.37% WO ₃ < 0.01% Mo
6	12	13	"	"	0.28	< 0.01	
7	13	14	"	"	0.38	< 0.01	
8	14	15	"	"	< 0.01	< 0.01	
D 3829	15	16	"	"	< 0.01	< 0.01	
D 3830	41	42	1.0	1.0	< 0.01	< 0.01	
1	42	43	"	"	3.62	0.10	
2	43	44	"	"	0.05	< 0.05	
3	44	45	"	"	0.33	< 0.01	
4	45	46	"	"	0.09	< 0.01	
5	46	47	"	"	0.09	< 0.01	
6	47	48	"	"	0.16	< 0.01	
7	48	49	"	"	0.47	< 0.01	
8	49	50	"	"	0.38	< 0.01	
9	50	51	"	"	0.83	< 0.01	
40	51	52	"	"	0.14	< 0.01	
1	52	53	"	0.80	0.35	< 0.01	
2	53	54	"	1.0	2.17	0.05	C lens: 48 - 60m, 12m @ 1.55% WO ₃ 0.05% Mo
3	54	55	"	"	0.56	< 0.01	
4	55	56	"	"	2.82	0.10	
5	56	57	"	"	2.65	0.09	
6	57	58	"	"	5.20	0.18	
7	58	59	"	"	2.62	0.08	
8	59	60	"	"	0.44	< 0.01	
9	60	61	"	"	0.03	< 0.01	
50	61	62	"	"	0.02	< 0.01	
1	62	63	"	"	0.40	< 0.01	
2	63	64	"	"	0.03	< 0.01	
3	64	65	"	"	0.45	< 0.01	
4	65	66	"	"	0.12	< 0.01	
5	66	67	"	"	0.08	< 0.01	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. D 240/7

SAMPLE No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 3856	67	68	1.0	1.0	0.70	0.02	67 - 72m, 5m @ 1.48% WO ₃ 0.05% Mo ³
7	68	69	"	"	2.72	0.10	
8	69	70	"	"	1.60	0.04	
9	70	71	"	"	1.78	0.06	
60	71	72	"	"	0.60	< 0.01	
1	72	73	"	"	0.09	< 0.01	
D 3862	73	74	1.0	1.0	< 0.01	0.01	

SPECIFIC GRAVITY

Determined by:

Depth (m) :
 Rock Type :
 G. :

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/7

LAB. K.I.S.			LAB. K.I.S.			LAB. Amde1			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D3820	0.37	<0.01	D4481	0.37		D4482	0.43		D4483	0.42	
27	0.38	<0.01	84	0.46		85	0.50		86	0.50	
36	0.16	<0.01	87	0.23		88	0.26		89	0.30	
45	2.65	0.09	90	2.72		91	2.77		92	2.78	
55	0.08	<0.01	93	0.05		94	0.11		95	0.15	
D3860	0.60	<0.01	D4496	0.21		D4497	0.86		D4498	0.79	

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/7

0 - 14.30m

B LENS

0 - 3.16 Marble

Barren grey white ch.

3.16 - 9.50m Garnet pyroxene hornfels

Pyroxene rich fine grained andradite skarn. Weakly mineralized, 5 - 8m. Leached 7.3 - 8.3m.

9.50 - 11.0m Marble

Barren grey ch.

11.0 - 14.30m Garnet pyroxene hornfels

Moderate disseminated scheelite in a pyroxene rich andradite garnet skarn.

14.30 - 39.30m

HANGINGWALL BIOTITE HORNFELS

Fine grained barren purplish brown bh. Quality of core is good for bh. R.Q.D. (14.02 - 38.40) = 74%.

39.30 - 54.60m

PYROXENE GARNET HORNFELS

Pale green pyroxene hornfels containing white calcite pods rimmed by pale brown grossular garnet. This unit contains weak sporadic mineralization throughout.

54.60 - 60.50m

GARNET HORNFELS

High grade finely disseminated scheelite in a fine medium grained andradite skarn which becomes increasingly pyroxene rich below 58.5m.

60.50 - 68.0m

BIOTITE PYROXENE HORNFELS

Mostly an intermixed unit of barren brown (bh) and green (ph) with occasional patches of andradite and grossular garnet skarn which often contains weak mineralization.

The upper contact of this unit does not appear faulted.

Minor chlorite on joint surfaces 64 - 65m.

Clay cemented breccia between 67 - 68m.

68.0 - 72.1m

GARNET HORNFELS

Very pyroxene rich andradite garnet skarn. No significant bedding. High grade disseminated scheelite.

72.1 - 74.0m

BIOTITE HORNFELS

Barren grey brown bh. Bedding: 74m 30° L.A.O.C.

74.0 - 77.49m

BRECCIA

This is interpreted as the Northern Boundary Fault breccia. There are recognisable fragments of bh to approx. 76m but below that the rock type appears to be quartzite.

77.49m E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D 240/6

PLANNING

Proposer: M.J. Danielson.
Location: Q.16 cuddy.

Depth: 75m.

Purpose of hole: C lens oreblocking.

Co-ordinates: 220 240 E 564 140

N

Inclination: -65°

Magnetic

Bearing: 360° Grid

Target depth:

Target: E

N

Approved by: M.C. Rogers.

Date: 10/5/75

SURVEY

Survey Co-ords: E

N

Survey bearing: Grid

Magnetic

Surveyed in by:

Date:

Actual Co-ords: 220 239.5 E 564 137.3

N

R.L. of collar: -97.1m

Inclination of hole:

Picked up by : R.J.H.

Date: 21/6/75

SUMMARY

Logged by : M.J. Danielson.

Results: B lens 10 - 12m 2m @ 0.89% WO₃
C lens 39 - 65m 26m @ 0.86% WO₃

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 25/5/75

Date terminated: 5/6/75

Casing: Size : BX
Depth : 1.52

Core: Size :	NQ	BQ		
Depth :	1.52	80.16		

Wedge Runoff:

Wedge placed: NIL

Depth:

Proposed by :

Approved by:

Reason:

Extension: NIL

Hole intersected lower

Reason for termination: metovolcanics.

Final depth: 80.16m.

Condition of hole on completion:

Casing : 1.52m BX remains.

Cemented : Yes.

Bore hole survey: Surveyed to 79.25m.

Water: Nil.

Comments on drilling conditions:

GROPEKO LIMITED - DOLPHIN MINE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 240/6

Survey method : Multishot camera.
Final depth : 80.16m
Casing depth : 1.52m.

Depth surveyed to : 79.25m
Date surveyed : 5.6.75
Surveyed by : V.J. Powell
Checked by : M.J. Danielson.

DEPTH	Bearing		Inclination		True Vertical Depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		W	N
15.24	360°	351°	25°	65°	13.80	1.01	6.39
30.48	358°30'	349°30'	24°15'	65°45'	27.66	2.11	12.63
45.72	357°	348°	24°	66°	41.58	3.34	18.73
60.96	356°30'	347°30'	24°22'	65°38'	55.47	4.74	24.86
79.25	355°	346°	24°	66°	72.18	6.52	32.10

REMARKS

GEOPEK LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 240/6

Depth Interval (metres)	Rock Type	Fractures/m.	Joint Angle (w.r.t. L.A.O.C.)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 3.96	ch	+20		clay & carbonate		71	18	Rubbly core due to collaring.
3.96 7.87	ch bph	8		clay & carbonate.	4m:45°	93	49	bad ground: 6.40 - 6.70
7.87 - 32.13	ch gph bh	4		clay	19m:55°	100	84	badground: 25.4 - 26.5
32.13 - 41.15	pgh gh	5		clay		100	79	bad ground: 36.7 - 37.1
41.15 - 61.87	gh, banded gh	4		clay		100	82	
61.87 - 80.16	banded bh/ph lv.	5		clay	64m:70° 76m:55° 79m:45°	100	71	
E.O.H.								

FURTHER DATA & REMARKS

- Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
- R.Q.D. (rock quality designator). = $\frac{\text{length core} > 10 \text{ cms}}{\text{length recovered}}$ %
DRILED
- Core size. 0 - 1.52 NQ
1.52 - 80.16 BQ

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 240/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	RECOVERED % CORE
0 - 3.96	3.96	2.83	71
6.65	2.69	2.69	100
7.87	1.22	.94	77
10.92	3.05	3.05	100
13.59	2.67	2.67	100
16.63	3.04	3.04	100
19.68	3.05	3.05	100
22.12	2.44	2.44	100
22.73	.61	.61	100
25.40	2.67	2.67	100
25.96	.56	.56	100
27.56	1.60	1.60	100
29.08	1.52	1.52	100
32.13	3.05	3.05	100
35.18	3.05	3.05	100
37.01	1.83	1.83	100
38.10	1.09	1.09	100
41.15	3.05	3.05	100
44.19	3.04	3.04	100
47.24	3.05	3.05	100
50.29	3.05	3.05	100
53.34	3.05	3.05	100
56.08	2.74	2.74	100
59.13	3.05	3.05	100
61.87	2.74	2.74	100
65.00	3.13	3.13	100
68.04	3.04	3.04	100
70.41	2.37	2.37	100
71.02	.61	.56	92
74.06	3.04	3.04	100
77.11	3.05	3.05	100
80.16	3.05	3.05	100
E.O.H.			

GROPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. D 240/6

SAMPLE No.	DEPTH (METRES)				ELEMENTS		COMMENTS
	From	To	Length	Length Recovered	WO ₃	Mo	
D 3782	9	10	1.0	1.0	<0.01	<0.01	
3	10	11	"	"	1.36	0.10	B lens: 10 - 12m, 2m @ 0.89% WO ₃ 0.06% Mo
4	11	12	"	"	0.42	<0.01	
5	12	13	"	"	0.03	<0.01	
D 3786	32	33	1.0	1.0	0.02	<0.01	
7	33	34	"	"	0.03	<0.01	
8	34	35	"	"	0.28	"	
9	35	36	"	"	0.07	"	
90	36	37	"	"	0.03	"	
1	37	38	"	"	0.01	"	
2	38	39	"	"	0.01	<0.01	
3	39	40	"	"	0.66	0.01	C lens: 39 - 65m, 26m @ 0.86% WO ₃ 0.02% Mo
4	40	41	"	"	2.12	0.05	
5	41	42	"	"	0.13	<0.01	
6	42	43	"	"	2.65	0.08	
7	43	44	"	"	2.07	0.07	
8	44	45	"	"	1.94	0.07	
9	45	46	"	"	1.34	0.03	
3800	46	47	"	"	0.64	0.01	
1	47	48	"	"	0.87	0.01	
2	48	49	"	"	1.02	0.02	
3	49	50	"	"	0.04	<0.01	
4	50	51	"	"	0.37	<0.01	
5	51	52	"	"	0.82	0.01	
6	52	53	"	"	1.10	0.03	
7	53	54	"	"	0.81	0.02	
8	54	55	"	"	0.48	0.01	
9	55	56	"	"	0.29	<0.01	
10	56	57	"	"	0.37	0.01	
1	57	58	"	"	0.08	<0.01	
2	58	59	"	"	1.02	0.02	
3	59	60	"	"	0.98	0.01	
4	60	61	"	"	0.42	<0.01	
5	61	62	"	"	1.10	0.02	
6	62	63	"	"	0.38	<0.01	
7	63	64	"	"	0.21	0.01	
D 3818	64	65	1.0	1.0	0.39	<0.01	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/6

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.E.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo	Check Sample No.	WO ₃	Mo
D 3783	1.36	0.10	D 3955	0.12	◀ 0.01	D 3957	0.19		D 3958	0.19	
3793	0.66	0.01	3959	0.68	0.07	3960	0.77		3961	0.85	
3803	0.04	◀ 0.01	3962	0.37	◀ 0.01	3963	0.53		3964	0.53	
3809	0.29	◀ 0.01	3965	0.36	0.01	3966	0.47		3967	0.47	
D 3818	0.39	◀ 0.01	D 3968	0.05	◀ 0.01	D 3969	0.06		D 3970	0.054	

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D, D, H. D 240/6 - Batch Check.

LAB. K.I.S.			LAB. K.I.S.			LAB.			LAB.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 3782	<0.01	<0.01	D 3971	0.01	<0.01						
x 3	1.36	0.10	2	0.13	<0.01						
4	0.42	<0.01	3	0.39	<0.01						
D 3785	0.03	<0.01	D 3974	0.02	<0.01						
D 3786	0.02	<0.01	D 3975	0.02	<0.01						
7	0.03	<0.01	6	0.02	<0.01						
8	0.28	<0.01	7	0.27	<0.01						
9	0.07	<0.01	8	0.06	<0.01						
90	0.03	<0.01	9	0.02	<0.01						
1	0.01	<0.01	80	0.04	<0.01						
2	0.01	<0.01	1	<0.01	<0.01						
x 3	0.66	0.01	2	0.66	0.04						
4	2.12	0.05	3	1.72	0.04						
D 3795	0.13	<0.01	4	1.28	0.02						
6	2.65	0.08	5	2.60	0.07						
7	2.07	0.07	6	1.58	0.07						
8	1.94	0.07	7	1.87	0.06						
9	1.34	0.03	8	1.38	0.04						
D 3800	0.64	0.01	9	1.10	0.03						
1	0.87	0.01	3990	0.84	0.01						
2	1.02	0.02	1	1.02	0.03						

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/6 Batch Check (cont. 2.)
(Page)

LAB. K.I.S.			LAB. K.I.S.			LAB.			LAB.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 3803	0.04	< 0.01	D 3992	0.38	< 0.01						
4	0.37	< 0.01	3	0.46	0.01						
5	0.82	0.01	4	0.88	0.02						
6	1.10	0.03	5	1.10	0.04						
7	0.81	0.02	6	0.78	0.02						
8	0.48	0.01	7	0.42	0.01						
9	0.29	< 0.01	8	0.31	< 0.01						
3810	0.37	0.01	3999	0.37	0.01						
11	0.08	< 0.01	4000	0.08	< 0.01						
2	1.02	0.02	1	0.94	0.01						
3	0.98	0.01	2	0.98	0.02						
4	0.42	< 0.01	3	0.46	< 0.01						
5	1.10	0.02	4	0.61	< 0.01						
6	0.38	< 0.01	5	0.37	< 0.01						
7	0.21	0.01	6	0.18	0.01						
D 3818	0.39	< 0.01	D 4007	0.04	< 0.01						

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/6

- 0 - 19.80m **B LENS**
- 0 - 6.40m Marble
Barren pale whitish grey marble. Minor pink grossular garnet.
- 6.40 - 7.50m Biotite pyroxene hornfels
Medium grained barren blotched green and black rock. No bedding. Core loss 6.65 - 7.87 = 23%
- 7.50 - 10.45m Marble
Barren grey ch.
- 10.45 - 12.50m Garnet pyroxene hornfels
Weakly mineralized fine grained pyroxene rich andradite garnet skarn.
- 12.50 - 19.80m Biotite pyroxene hornfels
Dominantly a barren grey bh with approx. 25% green ph. Very minor grossular garnet 18.5 - 19.3m. Bedding: 19m 55° L.A.O.C.
- 19.80 - 31.40m **HANGINGWALL BIOTITE HORNFELS**
- Barren fine grained grey bh. Quality of core is generally good with some minor broken ground 25.4 - 26.5m.
- 31.40 - 39.10m **PYROXENE GARNET HORNFELS**
- Typical pgh. Basically a pale green ph with white ovoids of carbonate up to 5cm dia. rimmed by pale brown grossular garnet. Variable scheelite mineralization as both coarse grains and finely disseminated.
- 39.10 - 49.30m **GARNET HORNFELS**
- Massive medium to coarse grained andradite garnet skarn. Highly mineralized in form of finely disseminated scheelite.
- 49.30 - 63.50m **BANDED GARNET HORNFELS**
- Fine to medium grained andradite garnet skarn. Moderate finely disseminated scheelite but lower grade than unit above. This unit gradually becomes more pyroxene rich below 54m with increasing barren bh and ph interbeds up to 10cm wide e.g. 55.0 - 55.7m. This unit probably represents lower C lens but there is no significant marble marker.
- Bedding: 52m 40° L.A.O.C.
59m 55° "

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 240/6

63.50 - 66.0m

BANDED BIOTITE PYROXENE HORNFELS

Barren thinly bedded grey (bh) and green (ph). Minor pink grossular garnet 65.0 - 65.5m.

66.0 - 78.0m

LOWER METAVOLCANICS (?)

This unit does not have the typical appearance of lower metavolcanics.

It is a mottled grey rock with abundant mica. No mineralization.

78.0 - 80.16m

BANDED BIOTITE PYROXENE HORNFELS

Thinly bedded, barren grey green hornfels.

80.16m E.O.H.

GEOPEKO LIMITED - KING ISLANDLOG OF D.D.H. NO: D 240/5PLANNING

Proposer: **M.J. Danielson** Depth: 150 metres.
 Location: 220 240 E Main decline.

Purpose of hole: Oreblocking below
 -150m RL.

Co-ordinates: 220 240 E 564 075 N
 Inclination: - 55° Target depth: 50 metres
 Bearing: 180° °Grid °Magnetic
 Target: E N
 Approved by: **M.C. Rogers** Date: 1/8/74

SURVEY

Survey Co-ords: E N
 Survey bearing: °Grid °Magnetic
 Surveyed in by: Date:
 Actual Co-ords: **220339.6 E 564075.2** N
 R.L. of collar: -98.4 Brg. 183°27' Inclination of hole: -53°54'
 Picked up by: **M.G.M.** Date: 22 August, 1974.

SUMMARY

Logged by: **M. J. Danielson**
 Results: C lens, 43 - 73m, 30m @ 1.68% WO₃
 80 - 117m, 37m @ 2.01% WO₃
 145 - 151m, 6m @ 0.82% WO₃

DRILLING

Driller / Contractor: **A.D.D.**
 Date commenced: ~~1/8/74~~ Date terminated: 4/9/74

Casing:	Size :	BX			
	Depth:	1.52			
Core:	Size :	NQ	BQ		
	Depth:	1.52	172.90		

Wedge Runoff:

Wedge placed: **NIL** Depth:
 Proposed by: Approved by:
 Reason:

Extension: **NIL** Final depth: 172.90 metres.

Reason for termination: Hole turned into
 unmineralised footwall beds.

Condition of hole on completion:

Casing : 1.5m BX remains.
 Cemented: Yes.

Bore hole survey: Surveyed to 170.69 metres.

Water: Normal water pressure throughout.

Comments on drilling conditions:

Brecciated and weathered ground conditions below 97 metres.

GEOPEKO LIMITED - Dolphin MineSUMMARY BORE HOLE SURVEY DATAD.D.H. NO. D 240/5

Survey method : Multishot camera

Depth surveyed to : 170.69m.

Final depth : 172.89 metres.

Date surveyed : 4/9/74

Casing depth : 1.52 metres.

Surveyed by : G.L. Buckland.

Checked by : G.L. Buckland.

DEPTH (m)	Bearing		Inclination		True Vertical depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
15.24	183°	174°	35°30'	-54°30 ⁺	12.41	8.80	0.95
30.48	183°45'	174°45'	35°30'	-54°30'	24.81	17.61	1.73
45.72	184°	175°	35°45'	-54°15'	37.18	26.48	2.51
60.96	184°15'	175°15'	36°	-54°	49.55	35.39	3.25
76.20	185°30'	176°30'	36°	-54°	61.88	44.33	3.83
91.44	187°	178°	36°	-54°	74.21	53.27	4.27
106.68	188°	179°	35°45'	-54°15'	86.55	62.22	4.49
121.92	189°	180°	35°15'	-54°45'	98.96	71.04	4.52
137.16	189°30'	180°30'	35°30'	-54°30'	111.39	79.85	4.49
152.40	190°	181°	35°45'	-54°15'	123.81	88.69	4.34
170.69	190°30'	181°30'	35°	-55°	138.74	99.25	4.11

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/5

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 15.26	Hangingwall bh	13		clay to 12.0m, carbon- ate	8m:20° LAOC	100	51	0.- 0.75 rubble. bad ground; 3.78 - 3.94
15.26 - 16.96	hangingwall bh	+20		chlorite		95	17	Fault zone. bad ground; 15.98 - 16.40 core leached and brecciated
16.96 - 26.64	hangingwall bh	14		minor carbon- ate, pyrite @ 20.0 22.7m.		100	54	
26.64 - 44.88	pg	4		pyrite @ 28.86, otherwise fresh.		100	91	
44.88 - 73.94	gh	6		pyrite @53.24		100	81	
73.94 - 78.94	marble marker.	7		clay	76m:30 LAOC	83	66	badly broken ground; 75.70 - 76.22

FURTHER DATA & REMARKS (Compression Tests)

- Core Size: 0 - 0.75 NQ
0.75 - 172.89m. BQ
- For detailed % core recovery within each depth interval consult core recovery page.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/5

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
78.94 - 94.84	Banded gh/bh/ gh	9		chlorite: 83 - 83.5m	83.5m: 32° LAOC	102	59	core is leached and brecciated: 78.94 - 82.0 83.0 - 83.5
94.84 - 112.98	gh	12		clay		86	37	97 - 113m: (a) core is leached and weathered. (b) Little structural strength, core can be broken by hand. (c) Lost core is due to grinding of soft core - NOT cavities etc.
112.98 - 126.18	gh/ pyroxene calcite hornfels.	8		clay carbonate; chlorite @ 117.5m.		89	67	bad ground: 121.70 - 124.66
126.18 - 130.45	bh	18		minor carbonate.		100	25	
130.45 - 137.46	pgh/	11		clay		101	47	<u>Fresh</u> rock and <u>not</u> leached or weathered.

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO.D 240/5

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
137.46 - 151.21	pgh/gh	12		clay		99	56	badly broken ground; 137.46 - 139.37 with (a) 19% core loss. (b) is leached and weathered with little structural strength. (c) is brecciated and recemented with clay(?) The leaching and brecciation is particularly bad; 147 - 151.2m.
151.21 - 166.04	Biotite actinolite hornfels.	8		mostly chlorite, minor clay.		100	70	This interval is not so heavily leached as the preceding one but the core is still strongly brecciated.

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/5

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
166.04 - 172.90	Biotite actinolite hornfels.	+15		clay, chlorite	162m:25° 171m:30° LAOC	99	51	Minor intricate thin (1cm) carbonate veining through- out. This unit is similar to the preceding one i.e. much brecciation but little leaching or weathering. NOTE: heavily leached and weathered: 171.6 - 172.9m

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLANDCORE RECOVERYD.D.H. No. D 240/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 1.98	1.98	1.90	96
2.82	0.84	0.84	100
3.78	0.96	1.00	104
3.94	0.16	0.16	100
4.27	0.33	0.39	118
5.18	0.91	0.90	99
6.40	1.22	1.22	100
6.86	0.46	0.32	70
7.95	1.09	1.10	101
8.51	- .56	0.65	116
10.36	1.85	1.85	100
11.33	0.97	1.00	103
13.41	2.08	2.12	102
14.02	0.59	0.62	105
15.26	1.24	1.23	99
15.98	0.72	0.75	104
16.10	- .12	0.12	100
16.63	0.53	0.55	1-4
16.96	0.33	0.20	61
17.91	0.95	0.87	92
19.53	1.62	1.60	99
20.12	0.59	0.60	101
22.00	1.98	1.91	96
23.42	1.32	1.40	106
24.99	1.57	1.57	100
26.21	1.22	1.19	98
26.64	0.43	0.53	123
29.62	2.98	2.90	97
32.41	2.79	2.85	102
32.97	0.58	0.60	103
35.71	2.74	2.77	101
38.74	3.03	3.04	100
41.83	3.09	3.06	99
44.88	3.05	3.06	100
47.73	2.85	2.85	100
50.80	3.07	3.18	104
53.24	2.44	2.30	94
56.49	3.25	2.97	91
59.33	2.84	2.90	102
62.46	3.13	3.11	99
63.80	1.34	1.37	102
65.18	1.38	1.62	117
67.71	2.53	2.74	108
70.18	2.47	2.55	103
71.88	1.70	1.55	91
73.94	2.06	2.11	102

GEOPEKO LIMITED - KING ISLANDCORE RECOVERYD. D. H. No. D 240/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
75.46	1.52	1.15	76
76.22	0.76	0.47	62
77.47	1.25	1.12	90
78.94	1.47	1.42	97
81.15	2.21	2.14	97
83.08	1.93	2.05	106
86.13	3.05	3.23	106
88.64	2.51	2.32	92
90.32	1.68	1.74	104
92.05	1.73	1.76	102
93.65	1.56	1.62	104
94.84	1.19	1.30	109
96.62	1.78	2.03	114
97.54	0.92	0.83	90
98.54	1.00	0.70	70
99.54	1.00	1.06	106
101.75	2.21	1.80	81
104.62	2.87	2.70	94
105.49	0.87	0.80	92
106.91	1.42	1.42	100
107.85	0.94	0.65	69
110.08	2.23	1.12	50
111.71	1.63	1.30	80
112.98	1.27	1.24	98
114.99	2.01	1.96	98
118.03	3.04	3.04	100
121.08	3.05	3.02	99
124.13	3.05	1.71	56
124.66	0.53	0.51	96
127.18	2.52	2.52	100
128.40	1.22	1.25	102
129.54	1.14	1.13	99
130.45	0.91	0.88	97
133.27	2.82	2.85	101
134.85	1.58	1.45	92
136.32	1.47	1.54	105
137.46	1.14	1.26	111
137.97	0.51	0.30	59
138.68	0.71	0.60	85
139.37	0.69	0.64	93
142.06	2.69	2.66	99
144.32	2.26	2.40	106
147.22	2.90	2.90	100
150.29	3.07	3.07	100
151.21	0.92	1.00	109
152.42	1.21	1.16	96

GEOPEKO LIMITED - KING ISLANDCORE RECOVERYD.D.H. No. D 240/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
154.61	2.19	2.17	99
157.66	3.05	3.10	102
160.71	3.05	3.05	100
163.75	3.04	3.05	100
166.04	2.29	2.25	98
167.18	1.14	1.12	98
167.72	0.54	0.52	96
168.63	0.91	0.80	88
169.49	0.86	1.00	116
170.44	0.95	0.93	98
171.60	1.16	1.11	96
172.90	1.30	1.28	98

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No.D 240/5

SAMPLE No.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
D2551	32	33	1.0	1.0	0.01	0.01					
2	33	34	"	"	4.90	0.19					
3	34	35	"	"	0.08	0.01					
4	35	36	"	"	0.82	0.02					
5	36	37	"	"	0.19	0.01					
6	37	38	"	"	0.17	0.01					
7	38	39	"	"	0.08	0.01					
8	39	40	"	"	0.68	0.04					
9	40	41	"	"	0.46	0.01					
60	41	42	"	"	0.19	0.01					
X1	42	43	"	"	0.05	0.01					
2	43	44	"	"	1.34	0.05					
3	44	45	"	"	0.56	0.01					
4	45	46	"	"	0.44	0.01					
5	46	47	"	"	3.05	0.08					
6	47	48	"	"	2.40	0.07					C lens 30m
7	48	49	"	"	1.72	0.07					@
8	49	50	"	"	2.72	0.13					
9	50	51	"	"	1.18	0.05					1.68%
70	51	52	"	"	4.70	0.17					WO ₃
X1	52	53	"	"	4.80	0.19					
2572	53	54	"	"	1.41	0.06					
2573	54	55	"	"	2.05	0.09					
4	55	56	"	0.73	1.48	0.08					
5	56	57	"	1.0	1.92	0.09					
6	57	58	"	"	1.39	0.07					
7	58	59	"	"	1.70	0.08					
8	59	60	"	"	1.45	0.07					
9	60	61	"	"	1.35	0.06					
80	61	62	"	"	1.37	0.06					
X1	62	63	"	"	2.72	0.10					
2	63	64	"	"	1.47	0.05					
3	64	65	"	1.20	1.16	0.02					
4	65	66	"	1.0	1.94	0.06					
5	66	67	"	1.17	2.72	0.08					
6	67	68	"	1.0	0.29	0.01					
7	68	69	"	"	0.80	0.02					
8	69	70	"	"	1.06	0.03					
9	70	71	"	0.87	0.33	0.01					
90	71	72	"	1.0	0.38	0.01					
X1	72	73	"	"	0.37	0.01					

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No. D 240/5

SAMPLE No.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
2	73	74	1.0	1.0	0.23	0.01					
3	74	75	"	0.71	<0.01	<0.01					
D2594	75	76	"	0.65	0.02	<0.01					
D2595	76	77	"	0.86	<0.01	<0.01					
6	77	78	"	1.0	<0.01	<0.01					
7	78	79	"	0.95	<0.01	<0.01					
8	79	80	"	0.92	0.13	<0.01					
9	80	81	"	0.95	0.46	0.01					
2600	81	82	"	1.0	2.44	0.08					
1	82	83	"	"	1.53	0.04					
2.	83	84	"	"	0.03	<0.01					
3	84	85	"	"	1.72	0.07					
4	85	86	"	"	1.03	0.03					
5	86	87	"	"	1/11	0.03					
6	87	88	"	"	1.09	0.03					
7	88	89	"	"	0.22	<0.01					
8	89	90	"	"	0.69	0.01					
9	90	91	"	"	5.1	0.15					
10	91	92	"	"	1.25	0.02					
1	92	93	"	"	1.64	0.05					
2	93	94	"	"	1.20	0.03					
3	94	95	"	"	1.74	0.04					
4	95	96	"	"	1.06	0.02					
5	96	97	"	0.84	1.60	0.02					
6	97	98	"	0.83	8.2	0.20					
7	98	99	"	0.77	2.69	0.05					
8	99	100	"	1.0	5.7	0.14					
9	100	101	"	0.80	3.5	0.07					
D2620	101	102	"	0.77	1.82	0.02					
D2621	102	103	"	0.90	2.29	0.03					
2	103	104	"	1.0	6.6	0.17					
3	104	105	"	0.90	2.62	0.04					
4	105	106	"	1.0	3.61	0.06					
5	106	107	"	1.0	1.44	0.01					
6	107	108	"	0.74	4.5	0.09					
7	108	109	"	0.42	1.0	0.01					
8	109	110	"	0.47	1.11	0.01					
9	110	111	"	0.76	1.11	0.01					
30	111	112	"	1.0	0.89	0.01					
1	112	113	"	"	0.67	0.01					
2	113	114	"	"	0.52	0.01					

C lens
37m
@
2.01%
WO₃

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No. D 240/5

SAMPLE No.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
3	114	115	1.0	1.0	0.08	<0.01					
4	115	116	"	"	0.95	0.02					
5	116	117	"	"	1.26	0.03					
6	117	118	"	"	<0.01	<0.01					
2637	118	119	"	"	0.03	<0.01					
2663	138	139	"	0.90	0.66	0.01					
4	139	140	"	1.0	0.22	<0.01					
5	140	141	"	"	0.05	<0.01					
6	141	142	"	0.95	0.41	<0.01					
7	142	143	"	1.0	0.06	<0.01					
8	143	144	"	"	0.12	<0.01					
9	144	145	"	"	0.14	<0.01					
2670	145	146	"	"	0.43	<0.01					
D 2671	146	147	"	"	1.04	0.03					
2	147	148	"	"	0.83	0.01					C lens
3	148	149	"	"	0.87	0.02					6 metres
4	149	150	"	"	1.35	0.03					0.82%
5	150	151	"	"	0.37	<0.01					WO ₃
6	151	152	"	"	0.10	<0.01					
2677	152	153	"	"	<0.01	<0.01					

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/5

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 2561	0.05	< 0.01	D 0196	0.11	0.03	D 0195	0.10	0.035	D 0194	0.15	< 0.01
2551	0.01	< 0.01	0199	0.03	0.02	0198	0.13	0.015	0197	0.23	< 0.01
2571	4.80	0.19	0202	1.54	0.10	0201	1.64	0.085	0200	1.59	0.034
2591	0.37	0.01	0205	0.61	0.05	0204	0.58	0.025	0203	0.61	0.009
2581	2.72	0.10	0208	2.55	0.14	0207	2.65	0.11	0206	2.62	0.014
2666	0.41	< 0.01	0214	0.67	0.05	0213	0.78	0.03	0212	0.78	0.015
2631	0.67	0.01	0217	0.72	0.06	0216	0.81	0.05	0215	0.83	0.016
2621	2.29	0.03	0220	2.33	0.09	0219	2.40	0.04	0218	2.30	0.017
2601	1.53	0.04	0223	1.37	0.17	0222	1.77	0.075	0221	2.06	0.037
2611	1.64	0.05	0226	1.58	0.10	0225	1.70	0.07	0224	1.59	0.029

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/500 - ~~98~~ 15.98**HANGINGWALL BIOTITE HORNFELS**

Brownish grey fine grained barren biotite hornfels.

aplite 1.50 - 1.80
6.90 - 7.10

Carbonate vein 4cm. wide at 3.78m. Very minor thin (approx. 1mm) carbonate veining is spread throughout this unit.

The unit is weakly spotted particularly 5 - 7m.
Bedding: 8m 20° LAOC

11.8 - 9.4 green pyroxene hornfels.

15.98 - 16.96

FAULT

Core is badly broken with RQD = 0% and brecciated - recemented with black clay. Moderate chlorite on fracture surfaces and some slickensides at 16.15m. Core recovery 89%

16.96 - 27.24m

HANGINGWALL BIOTITE HORNFELS

The biotite hornfels on this lower side of the possible fault zone is a pale grey colour without the brownish tinge of the biotite hornfels described earlier.

The unit is fine grained and barren with little or no carbonate veining. Minor chlorite on joint surfaces at 24.5 - 25.5m.

27.24 - 44.88

PYROXENE GARNET HORNFELS

A mottled green pyroxene hornfels and pale pink brown grossular garnet. The unit has only a low white carbonate content which occurs in irregular small patches usually less than 5mm dia.

Inlier of biotite hornfels 30.22 - 32.60.

Mineralisation is mostly low grade but there is some high grade coarse scheelite eg. 33.15 - 33.40m. The major part of this unit would be sub-oregrade.

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/5

44.88 - 73.94

GARNET HORNFELS

Fine to medium grained brown andradite garnet skarn. High grade mineralisation in form of finely disseminated scheelite.

Quality of core is good - RQD = 81%

Below 70m the skarn is more pyroxene rich and has less scheelite mineralisation.

73.94 - 78.94

MARBLE MARKER

This marker horizon consists of

73.94 - 74.24 pyroxene hornfels
74.24 - 76.22 biotite hornfels
bedding 76m 30° LAOC
76.22 - 78.94 barren white grey marble.

78.94 - 82.80

BANDED GARNET HORNFELS

A weakly mineralised pyroxene rich andradite garnet skarn.

This whole unit appears as a recemented breccia with clay as the groundmass. The unit appears to have little structural strength and gives the appearance of being 'weathered'.

82.80 - 83.80

BIOTITE HORNFELS

Mostly a barren grey weakly banded biotite actinolite hornfels.

Bedding: 83.5m 32° LAOC.

There is some minor green pyroxene and it is this section 83.08 - 83.50 which is heavily brecciated, partly clay recemented at 83.10 - 83.15.

83.80 - 97.00

GARNET HORNFELS (Lower C Lens?)

A fine grained brown andradite skarn of low to moderate grade mineralisation. The unit is not banded as is the typical lower C lens horizon but yet still gives the impression of being lower C lens because

- (a) only low to moderate grade scheelite mineralisation whereas Upper C lens in this area has been very high grade.
- (b) high green pyroxene content eg. 88.4 - 89.2 not necessarily as distinct beds.
- (c) variations in general appearance of the skarn. In Upper C lens the unit is usually a more homogeneous medium to coarse grained skarn.
- (d) fine grained nature of the skarn.

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/5

The whole of this unit appears fresh, unweathered and unbrecciated.

97.00 - 113.60

GARNET HORNFELS

Below 97m the grade of mineralisation appears to increase and the texture of the skarn seems more homogeneous and medium grained.

Important 97 - 113m the core is leached and 'weathered' with significant core loss. Particularly note assay page in respect of length of core assayed per metre interval.

This unit would have little structural strength as many sticks of core could be broken by hand.

According to the diamond drillers the significant core loss was not due to cavities etc. but as a result of the soft core grinding itself away in the barrel.

Despite the leached and weathered appearance, this unit has the 'look' of the Upper C lens horizon.

113.60 - 126.18

PYROXENE CALCITE HORNFELS

This interval is a variety of rock types briefly subdivided as follows:-

- 113.60 - 114.66 pale green grey marble. No mineralisation. Brecciated and clay recemented particularly at 114.4.
- 114.66 - 116.80 fine grained andradite skarn, weakly mineralised.
- 116.80 - 117.53 barren grey biotite hornfels.
- 117.53 - 120.90 barren white marble with some minor inclusions of green ph and andradite skarn weakly mineralised eg. 119.0 - 119.5. 119.2 - 119.5 is leached and a clay recemented breccia.
- 120.9 - 126.18 a mixture of weakly mineralised skarn and green pyroxene hornfels. There is significant loss of core 121.08 - 124.13 56% recovered. This section of core is moderately broken with some signs of minor brecciation but is not leached or weathered. The lower contact of this unit does not appear faulted although there is 5cms of core with chlorite on fracture surfaces. Core recovery in the area is 100%.

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/5

126.18 - 130.60

BIOTITE HORNFELS

Barren grey biotite hornfels. Core is of moderate quality RQD = 25%. Minor thin (approx. 1mm) carbonate veining 127.5 - 128.0.

130.60 - 146.00

PYROXENE GARNET HORNFELS

The upper contact of this unit is not faulted as the bh/pgh contact can be clearly seen in one piece of core.

The interval 130.6-140 is typical pgh illustrating white carbonate pods up to 7cms dia. rimmed with honey coloured grossular garnet all set in a green pyroxene groundmass. Occasional specks of scheelite occur.

Below 140m. the unit is a more mottled green ph and brown grossular garnet mixture with occasional small (<2cms dia.) patches of white carbonate. The distinctive 'pods' of the upper part of the unit are absent in the lower part.

Between 130.6 - 138 the pgh is fresh and unweathered.

Between 138 - 146 the pgh is leached and weathered and brecciated recemented in a clay matrix.

146.0 - 151.36

GARNET HORNFELS

This unit is not typical Upper C lens skarn.

It is a moderately mineralised fine to medium grained andradite skarn which is heavily leached weathered and brecciated recemented in a clay matrix. Many of the breccia fragments are barren and often bedded pyroxene hornfels.

This strong leaching and brecciation is best developed 150 - 151.36.

151.36 - 172.90

BIOTITE ACTINOLITE HORNFELS

This unit is mostly a pale grey brown sometimes bedded barren silicate hornfels.

The whole of the unit is brecciated but is mostly fresh and unweathered except 171.6 - 172.9.

Between 166 - 171 the core is laced with fine thin (<1mm) white carbonate veining.

Joint surfaces throughout the whole of this unit are mostly chlorite coated.

Bedding: 162m 25° LAOC.
171m 30° "

172.9 metres E.O.H.

GEOPEKO LIMITED - KING ISLANDLOG OF D.D.H. NO: D 240/4PLANNING

Proposer: M. J. Danielson Depth: 120 m.

Location: 220 240 E Main decline.

Purpose of hole: Oreblocking

Co-ordinates: 220 240 E 564 075 N

Inclination: - 39° Target depth:

Bearing: 360° °Grid °Magnetic

Target: E N

Approved by: Date:

SURVEY

Survey Co-ords: E N

Survey bearing: °Grid °Magnetic

Surveyed in by: Date:

Actual Co-ords: 220239.7 E 564078.5 N

R.L. of collar: - 98.2 m.

Inclination of hole: Hole
cemented to collar.

Picked up by: M.G.M.

Date: 9/8/74

SUMMARY

Logged by: M. J. Danielson

Results: B lens - 16-19 3m @ 0.60%

C lens - 35-37 2m @ 2.72%

52-84 32m @ 1.35%

88-92 4m @ 0.89%

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 25/7/74.

Date terminated: 1/8/74

Casing: Size : BX

Depth: 0.76

Core: Size : NQ

Depth: 0.76

BQ

107.62

Wedge Runoff: NIL

Wedge placed:

Depth:

Proposed by:

Approved by:

Reason:

Extension: NIL

Final depth: 107.62m

Reason for termination:

Condition of hole on completion:

Casing : 0.76 BX remains.

Cemented: Yes

Bore hole survey: Hole surveyed to 106.68m

Water: Normal water return throughout.

Comments on drilling conditions:

GEOPEKO LIMITED - Dolphin MineSUMMARY BORE HOLE SURVEY DATAD.D.H. NO. D 240/4

Survey method : Multishot camera

Final depth : 107.59m

Casing depth : 1.52m

Depth surveyed to : 106.68m

Date surveyed : 1/8.74

Surveyed by : V.P.

Checked by : G.B.

DEPTH (m)	Bearing		Inclination		True Vertical depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		E/ N	W W
15.24	359°	350°	49°	- 41°	10.00	11.33	2.00
30.48	356° 30'	347° 30'	49°	- 41°	20.00	22.62	4.21
45.72	355° 45'	346° 45'	49°	- 41°	29.99	33.83	6.77
60.96	356° 30'	347° 30'	49° 15'	- 40° 45'	39.98	45.09	9.17
76.20	355° 30'	346° 30'	49° 15'	- 40° 45'	49.93	56.32	11.87
91.44	357°	348°	49° 15'	- 40° 15'	59.88	67.61	14.27
106.68	357°	348°	49°	- 41°	69.85	78.89	16.67

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/4

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 3.81	B lens Hangingwall bh	21		clay		87	21	rubble: 0 - 0.76
3.81 - 21.99	B lens Host rocks /gph/ calcite pgh	8		clay, carbonate chlorite 14.60 - 15.93	9.9m:45° LAOC	99	79	bad ground 14.73 - 14.94 core weakly leached: 11.0 - 14.73
21.99 - 51.74	Hangingwall bh/pgh	6		chlorite: 21.99 - 22.56 and 34.85 carbonate, minor pyrite.	27m:35° 29m:40° 31m:37° LAOC	99	86	bad ground: 21.99-22.56
51.74 - 73.81	gh/bgh /banded gh	8		minor pyrite @ 67.20 minor carbonate @ 70.76	71m:40°	97	73	core weakly leached 65.0-65.87

FURTHER DATA & REMARKS (Compression Tests)

- Core Size: 0 - 0.76 NQ
 0.76 - 107.62 BQ
- For detailed % core recoveries within each interval see the core recovery tabulation.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/4

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
73.81-91.54	banded gh/ mineral- ized banded footwall beds.	9		minor carbon- ate, minor pyrite @ 81.0 87.6m.	76m:40° 80m:40° 84m:35° 87m:35° 91m:38° LAOC	99	66	
91.54-101.55	mineral- ized banded footwall beds / unmineral- ized banded footwall beds.	17		minor pyrite @ 94.88, 100.33.	94m:40° 96m:35° 100m:45°	95	18	badly broken core, but shatter- ed: 92.20-92.50 99.75-100.03.
101.55 - 105.75	bh/ lower metavol- canics.	6				100	47	
105.75 - 107.62	bh	19		abundant chlorite		98	20	
E.O.H.								

FURTHER DATA & REMARKS (Compression Tests)

✓

CORE RECOVERY - DDH D 240/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 0.76	0.76	0.30	39
3.81	3.05	3.02	99
4.46	0.65	0.60	92
7.36	2.90	2.98	103
9.55	2.19	2.28	104
12.65	3.10	3.14	101
14.73	2.08	1.43	69
15.34	0.61	0.72	118
15.93	0.59	0.71	120
18.90	2.97	2.97	100
21.99	3.09	3.14	102
22.56	0.57	0.60	105
23.16	0.60	0.57	95
26.21	3.05	3.02	99
29.26	3.05	2.98	98
32.31	3.05	3.05	100
35.35	3.04	3.04	100
38.40	3.05	3.05	100
41.45	3.05	3.05	100
44.50	3.05	3.04	99
47.55	3.05	3.16	104
49.38	1.83	1.73	95
51.74	2.36	2.40	102
53.64	1.90	2.02	106
56.06	2.42	2.14	88
59.18	3.12	3.14	101
61.57	2.39	2.46	103
64.62	3.05	2.96	97
67.46	2.84	2.88	101
67.97	0.51	0.34	67
70.76	2.79	2.80	101
73.81	3.05	3.04	99
74.80	0.99	0.77	78
77.11	2.31	2.62	113
78.05	0.94	0.94	100
79.25	1.20	1.28	107
80.80	1.55	1.53	99
83.84	3.04	3.04	100
86.66	2.82	2.54	90
88.03	1.37	1.38	101
88.85	0.82	0.97	118
91.54	2.69	2.58	96
92.30	0.76	0.70	92
93.27	0.97	1.22	126
94.33	1.06	0.85	80
95.12	0.79	0.75	95
95.76	0.64	0.61	95

CORE RECOVERY - DWH D 240/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
96.01	0.25	0.34	136
97.41	1.40	1.31	94
98.63	1.22	1.22	100
100.13	1.50	1.05	70
103.05	2.92	2.80	98
105.46	2.41	2.91	120
106.76	1.30	1.13	87
107.62	0.86	0.94	109

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. NO. D 240/4

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo						
D2248	11	12	1.0	1.0	0.03	<0.01						
9	12	13	1.0	1.0	0.17	0.01						
50	13	14	1.0	1.0	0.61	0.01						
1	14	15	1.0	1.0	0.01	0.04						
2	15	16	1.0	1.0	0.01	0.04						
3	16	17	1.0	1.0	0.73	0.05						
4	17	18	1.0	1.0	0.44	0.03						B lens
5	18	19	1.0	1.0	0.62	0.07						3m/0.60%
2256	19	20	1.0	1.0	0.03	0.01						
2257	34	35	1.0	1.0	0.01	0.01						
8	35	36	1.0	1.0	0.92	0.03						
9	36	37	1.0	1.0	4.52	0.13						C lens
60	37	38	1.0	1.0	0.04	0.01						2m/ at
1	38	39	1.0	1.0	0.25	0.01						2.72%
2	39	40	1.0	1.0	0.01	0.01						
3	40	41	1.0	1.0	0.01	0.01						
4	41	42	1.0	1.0	0.02	0.01						
5	42	43	1.0	1.0	0.02	0.01						
6	43	44	1.0	1.0	0.04	0.01						
7	44	45	1.0	1.0	0.16	0.01						
8	45	46	1.0	1.0	0.02	0.01						
9	46	47	1.0	1.0	0.04	0.01						
2270	47	48	1.0	1.0	0.02	0.01						
D2271	48	49	1.0	0.89	0.02	0.01						
2	49	50	"	1.0	0.04	0.01						
3	50	51	"	1.0	0.14	0.01						
4	51	52	"	1.0	0.23	0.01						
5	52	53	"	1.0	1.00	0.04						
6	53	54	"	1.0	4.80	0.18						
7	54	55	"	1.0	1.84	0.08						
8	55	56	"	0.70	1.31	0.06						
9	56	57	"	1.0	1.00	0.04						
80	57	58	"	"	1.92	0.09						
1	58	59	"	"	1.98	0.10						
2	59	60	"	"	1.42	0.09						
3	60	61	"	"	1.50	0.16						
4	61	62	"	"	1.14	0.15						
5	62	63	"	"	0.88	0.03						
6	63	64	"	"	0.90	0.04						
7	64	65	"	"	0.75	0.05						
8	65	66	"	"	3.55	0.13						

SPECIFIC GRAVITY

Determined by:

Depth (m) :

Rock Type :

S.G. :

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. NO. D 240/

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
9	66	67	1.0	1.0	3.95	0.12					
90	67	68	"	"	0.27	0.01					
1	68	69	"	"	1.30	0.06					
2	69	70	"	"	1.67	0.04					
3	70	71	"	"	0.45	0.01					
4	71	72	"	"	1.26	0.06					
2295	72	73	"	"	1.08	0.04					
D2296	73	74	1.0	1.0	1.40	0.06					
7	74	75	"	0.80	1.04	0.05					
8	75	76	"	1.00	0.76	0.04					
9	76	77	"	1.20	0.65	0.05					
2300	77	78	"	1.0	0.64	0.04					
1	78	79	"	"	0.33	0.02					
2	79	80	"	"	0.70	0.03					
3	80	81	"	"	0.26	0.01					
4	81	82	"	"	0.60	0.02					
5	82	83	"	"	1.84	0.09					
6	83	84	"	"	0.92	0.07					
7	84	85	"	"	0.11	0.01					
8	85	86	"	"	0.14	0.01					
9	86	87	"	"	0.08	0.01					
10	87	88	"	"	0.44	0.12					
1	88	89	"	"	1.78	0.39					
2	89	90	"	"	0.72	0.04					4m
3	90	91	"	"	0.62	0.06					@
4	91	92	"	0.92	0.43	0.01					0.89%
5	92	93	"	1.0	0.09	0.01					
6	93	94	"	0.81	0.09	0.01					
7	94	95	"	0.89	0.03	0.01					
8	95	96	"	1.0	0.01	0.01					
9	96	97	"	"	0.01	0.01					
2320	97	98	"	"	0.07	0.01					
D2321	98	99	1.0	1.0	0.52	0.03					
2	99	100	"	0.68	0.02	0.01					
3	100	101	"	1.0	0.23	0.01					
4	101	102	"	"	0.04	0.01					
2325	102	103	"	"	0.01	0.01					

SPECIFIC GRAVITY

Determined by:

Depth (m) :

Rock Type :

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/4

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D-2271	0.02	< 0.01	D 0022	0.03	0.02	D 0021	0.04	0.025	D 0020	0.02	
X 2296	1.40	0.06	0025	1.42	0.09	0024	1.58	0.07	0023	1.31	
X 2290	0.27	< 0.01	0028	0.22	0.02	0027	0.38	0.04	0026	0.30	
X 2318	0.01	< 0.01	0031	0.03	0.01	0030	0.03	0.01	0029	0.01	
X 2308	0.14	< 0.01	0034	0.15	0.02	0033	0.20	0.03	0032	0.14	
- 2323	0.23	0.01	0037	0.21	0.02	0036	0.33	0.04	0035	0.26	
X 2266	0.04	< 0.01	0040	0.06	0.01	0039	0.06	0.015	0038	0.07	
X 2283	1.50	0.16	0043	1.54	0.21	0042	1.58	0.18	0041	1.63	
X 2259	4.52	0.13	0046	4.0	0.18	0045	4.10	0.11	0044	2.91	
X 2250	0.61	0.01	0049	0.63	0.04	0048	0.68	0.055	0047	0.62	

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/4

0 - 3.81

B LENS HANGINGWALL BIOTITE HORNFELS

A fine grained barren dark grey to purple unmineralised biotite hornfels.

3.81 - 21.20

B LENS HOST ROCKS

A variety of rock types subdivided as follows:-

Pyroxene Hornfels 3.81 - 10.45

Mostly a pale grey green fine grained barren hornfels. Very minor grossular garnet disseminated throughout. Bedding 9.90m 45° LAOC

Garnet Pyroxene Hornfels 10.45 - 18.90

A variable andradite garnet, pyroxene rock with moderate disseminated scheelite. 12.50 - 14.50
16.00 - 18.65

Lost core

12.65 - 14.75 1.42 recovered
=32% lost

Badly broken core 14.73 - 14.90m**Calcite Pyroxene Garnet Hornfels 18.90 - 21.20**

A variety of grey carbonate, green ph and pink grossular garnet. No mineralisation. This unit represents the base of the B lens sequence.

21.20 - 31.50

HANGINGWALL BIOTITE HORNFELS

Pale purplish brown and grey barren fine grained biotite hornfels. This unit exhibits well defined bedding which is unusual for this unit which is usually more massive.

Bedding 27m 35° LAOC
29m 40° "
31m 37° "

31.50 - 52.24

PYROXENE GARNET HORNFELS

Very biotite rich for top 2m with irregular pods of pink grossular garnet.

Inlier of biotite hornfels from 33.10 - 34.85m.

Below 35m the unit is more typical pgh with a basic green ph groundmass containing small carbonate pods, unusually less than 5cm rimmed by pink grossular garnet. The whole unit is weakly mineralised with some coarse scheelite between 35 - 37m. The unit is generally suboregrade.

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/4

52.24 - 64.62

GARNET HORNFELS

Medium to coarse grained brown andradite garnet skarn. High grade disseminated scheelite. No apparent bedding.

64.62 - 67.46

BIOTITE - GARNET HORNFELS.

Some fine grained grey barren interbeds of biotite hornfels intermixed with highly mineralised massive garnet hornfels.

67.46 - 83.84

BANDED GARNET HORNFELS.

Typical banded andradite garnet skarn and barren green ph interbeds up to 1cm wide. Moderate to high grade disseminated scheelite.

Bedding:	76m	40°	LAOC.
	80m	40°	"
	84m	35°	"

83.84 - 94.40

MINERALISED BANDED FOOTWALL BEDS.

This unit is gradational with the unit above but is defined by the appearance of some barren grey marble bands up to 10cm wide. Mineralisation is variable but mostly low grade.

Bedding:	87m	35°	LAOC
	91m	38°	"

94.40 - 101.55

UNMINERALISED BANDED FOOTWALL BEDS.

Similar to unit above but no significant andradite skarn beds.

Bedding	96m	35°	LAOC
	100m	45°	"

101.55 - 102.40

BIOTITE HORNFELS

Barren grey fine grained biotite hornfels.

102.40 - 105.75

LOWER METAVOLCANICS.

Typical grey green fine grained spotted with brown flecks of biotite - weakly volcanic texture.

105.75 - 107.62

BIOTITE HORNFELS

Barren grey fine grained biotite hornfels.

107.62

E.O.H.

GEOPEKO LIMITED - KING ISLANDLOG OF D.D.H. NO: D 240/3PLANNING

Proposer: M.J. Danielson Depth: 110
 Location: 220 240 E
 Main decline.

Purpose of hole: Oreblocking.
 Main C Lens.

Co-ordinates: 220240 E 564075 N
 Inclination: - 70° Target depth: 25m.
 Bearing: 180° °Grid °Magnetic
 Target: E N

Approved by: M.C. Rogers Date: 1/8/74

SURVEY

Survey Co-ords: E N
 Survey bearing: °Grid °Magnetic
 Surveyed in by: Date:

Actual Co-ords: 220239.6 E 564075.6 N

R.L. of collar: -98.2 Inclination of hole: -72° (Abney)

Picked up by: M.G.M. Date: 9 August, 1974.

SUMMARY

Logged by: M.J. Danielson

Results: C lens, 26 - 76m, 50m @ 0.98% WO₃

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 1.8.74

Date terminated: 13.8.74

Casing: Size : BX

 Depth: 1.52

Core: Size : NQ

 Depth: 1.52 BQ 94.94

Wedge Runoff:

Wedge placed: NIL

Depth:

Proposed by:

Approved by:

Reason:

Extension: NIL

Final depth: 94.94

Reason for termination: Hole passed into
 lower volcanics.

Condition of hole on completion:

Casing : 1.52 BX remains

Cemented: Yes.

Bore hole survey: Surveyed to 91.44 metres.

Water: Normal water return throughout.

Comments on drilling conditions:

GEOPEKO LIMITED - Dolphin MineSUMMARY BORE HOLE SURVEY DATAD.D.H. NO. D 240/3

Survey method : Multishot camera

Final depth : 94.95 metres.

Casing depth : 1.52 metres.

Depth surveyed to : 91.44m.

Date surveyed : 13.8.74

Surveyed by : V. Powell.

Checked by : G.L. Buckland.

DEPTH (m)	Bearing		Inclination		True Vertical depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		Σ S	Σ E
15.24	185°	176°	18°	- 72°	14.49	4.68	0.54
30.48	188°	179°	17°45'	- 72°15'	29.01	9.32	0.62
45.72	188°	179°	17°45'	- 72°15'	43.52	13.97	0.70
60.96	190°	181°	17°30'	- 72°30'	58.04	18.59	0.72
76.20	191°	182°	17°15'	- 72°45'	72.59	23.11	0.57
91.44	193°	184°	17°	- 73°	87.15	27.61	0.34

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO.D 240/3

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 14.99	bh/bph	17		carbon- ate: 0 - 10.0 chlorite: 11.10 - 11.50		96 (4.88 - 5.69: 58%)	32	0 - 0.90: rubble. Core broken throughout, but highly fractured: 4.39 - 7.23 12.60 - 14.99
14.99 - 24.99	bh	10		chlorite @ 21.10 carbonate @ 20.95 pyrite @ 15.40 and 20.73		98	63	
24.99 - 43.92	pgh/gh	3		carbonate @ 28.76, and 30.90, pyrite @ 40.84		99	93	

FURTHER DATA & REMARKS (Compression Tests)

- Core Size: 0 - 0.90 NQ
0.90 - 94.95 BQ
- For detailed % core recoveries within each depth interval consult core recovery page.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO.D 240/3

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
43.92 - 67.97	gh/bpb /banded gh	7		carbon- ate 4mm @ 51.92 co ₃ also @ 49.85 pyrite @ 46.32	54m:50° 59m:45° 63m:45° 67M:55° LAOC.	102	72	bad ground: 60.17 - 60.68
67.97 - 78.56	banded gh/ mineralised banded footwall beds	8		carbon- ate @ 70.0 pyrite @ 70.89	71m:60° 73m:50° 76m:45° @ LAOC	100	74	
78.56 - 83.62	minerlised banded footwall beds/ unmineralised b.f.b.	+20		carbon- ate	80m:60° LAOC.	65 (80.47 - 81.69:46%; 81.69 - 82.68: 51%; 82.68 - 83.62:21%)	12	Fault zone(?)
83.62 - 94.95	unmineral- ised banded footwall beds	7		chlorite carbon- ate.	83,7m: 55° 86m:40° LAOC	100	80	

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLANDCORE RECOVERYD, D, H, No. D 240/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.96	3.96	3.93	99
4.88	0.92	0.99	107
5.69	0.81	0.47	58
6.60	0.91	0.87	96
8.08	1.48	1.41	95
9.37	1.29	1.30	101
10.54	1.17	1.30	111
12.50	1.96	1.67	85
13.18	0.68	0.68	100
13.87	0.69	0.74	107
14.63	0.76	0.57	75
14.99	0.36	0.43	119
16.15	1.16	0.91	78
18.29	2.14	2.22	104
20.83	2.54	2.33	92
21.59	0.76	0.95	125
22.38	0.79	0.89	113
24.99	2.61	2.48	95
26.82	1.83	1.74	95
29.03	2.21	2.23	101
32.08	3.05	3.01	99
34.80	2.72	2.73	100
37.82	3.02	3.06	101
40.84	3.02	3.05	101
43.92	3.08	3.03	98
46.94	3.02	3.08	102
48.31	1.37	1.32	96
51.21	2.90	3.10	106
54.25	3.04	3.01	99
57.38	3.13	3.06	98
58.98	1.60	1.81	113
60.68	1.70	1.76	104
61.97	1.29	1.25	97
63.32	1.35	1.39	103
64.16	0.84	0.88	105
64.92	0.76	0.77	101
67.97	3.05	3.05	100
70.10	2.13	2.20	103
72.54	2.44	2.11	86
74.98	2.44	2.52	103
76.71	1.73	1.84	106
78.56	1.85	1.88	102
79.85	1.29	1.28	99
80.47	0.62	0.75	121
81.69	1.22	0.56	46
82.68	0.99	0.50	51

GEOPEKO LIMITED - KING ISLANDCORE RECOVERYD.D.H. No. D 240/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
83.62	0.94	0.20	21
84.73	1.11	1.01	91
85.80	1.07	1.11	103
87.10	1.30	1.22	94
90.22	3.12	3.10	99
93.27	3.05	2.92	96
94.95	1.68	1.85	110

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. NO. D 240/3

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo						
D2449	25	26	1.0	1.0	0.01	0.01						
50	26	27	"	"	2.37	0.08						
1	27	28	"	"	0.27	0.03						
2	28	29	"	"	0.96	0.03						
2453	29	30	"	"	0.34	0.02						
	30	31	1.0	1.0	0.23	0.02						Note 30 - 62m, average of left and right half core assay figures.
	31	32			1.14	0.06						
	32	33			0.05	0.01						
	33	34			0.36	0.03						
	34	35			2.95	0.11						
	35	36			2.24	0.06						
	36	37			1.14	0.06						
	37	38			1.16	0.06						
	38	39			1.73	0.09						
	39	40			0.97	0.05						
	40	41			1.39	0.08						
	41	42			1.32	0.08						
	42	43			1.72	0.08						
	43	44			1.38	0.06						
	44	45			1.52	0.07						
	45	46			1.81	0.08						
	46	47			2.34	0.10						
	47	48			2.66	0.11						
	48	49			1.82	0.06						
	49	50			0.36	0.02						
	50	51			0.45	0.02						
	51	52			0.94	0.04						
	52	53			0.74	0.03						
	53	54			0.30	0.04						
	54	55			0.01	0.01						
	55	56			0.12	0.01						
	56	57			1.26	0.05						
	57	58			1.48	0.05						
	58	59			0.54	0.03						
	59	60			1.26	0.04						
	60	61			2.34	0.09						
	61	62			0.55	0.02						
D2486	62	63			0.70	0.03						C lens 26 - 76
7	63	64			0.34	0.01						50m.
8	64	65			0.63	0.02						a) 0.98%
9	65	66			1.02	0.03						
90	66	67			0.64	0.03						

SPECIFIC GRAVITY

Determined by:

Depth (m) :

Rock Type :

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No.D 240/3

SAMPLE No.	DEPTH (METRES)			ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo					
1	67	68			0.40	0.02					
2	68	69			0.58	0.02					
3	69	70			0.28	0.01					
4	70	71			0.34	0.01					
5	71	72			0.22	0.01					
6	72	73			0.26	0.01					
7	73	74			0.66	0.02					
8	74	75			0.28	0.01					
2499	75	76			0.57	0.02					
2500	76	77			0.24	0.01					
1	77	78			0.43	0.01					
2	78	79			0.26	0.01					
3	79	80			0.20	0.01					
2504	80	81			0.35	0.01					

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No. D 240/3

RIGHT HAND SIDE OF CORE

SAMPLE No.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
D2508	30	31	1.0	1.0	0.24	<0.01					
2526	31	32			0.73	0.02					
2510	32	33			0.05	<0.01					
11	33	34			0.29	<0.01					
2535	34	35			3.85	0.13					
2515	35	36			2.41	0.04					
2514	36	37			1.17	0.04					
2513	37	38			1.19	0.04					
2516	38	39			1.13	0.04					
17	39	40			0.40	0.01					
18	40	41			1.42	0.06					
2532	41	42			1.33	0.06					
2520	42	43			1.93	0.08					
21	43	44			1.46	0.03					
22	44	45			1.44	0.05					
23	45	46			1.68	0.06					
24	46	47			2.29	0.09					
25	47	48			2.75	0.09					
2509	48	49			2.14	0.05					
2527	49	50			0.34	0.01					
28	50	51			0.52	0.01					
2538	51	52			0.95	0.02					
2530	52	53			0.73	0.01					
31	53	54			0.40	0.06					
2519	54	55			<0.01	<0.01					
2533	55	56			0.11	<0.01					
34	56	57			0.84	0.05					
2512	57	58			1.71	0.04					
2536	58	59			0.41	0.03					
37	59	60			1.80	0.07					
2529	60	61			2.37	0.11					
2539	61	62			0.55	0.01					

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - Dolphin MineASSAY DATAD.D.H. No. D 240/3

LEFT HAND SIDE OF CORE

SAMPLE No.	DEPTH (METRES)			ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo					
D2454	30	31			0.21	0.03					
5	31	32			1.55	0.09					
6	32	33			0.05	0.02					
7	33	34			0.43	0.04					
8	34	35			2.05	0.09					
9	35	36			2.26	0.08					
60	36	37			1.10	0.07					
1	37	38			1.12	0.07					
2	38	39			2.33	0.13					
3	39	40			1.53	0.09					
4	40	41			1.36	0.10					
5	41	42			1.31	0.09					
6	42	43			1.50	0.09					
7	43	44			1.29	0.08					
8	44	45			1.59	0.09					
9	45	46			1.94	0.10					
70	46	47			1.94	0.11					
1	47	48			2.56	0.13					
2	48	49			1.50	0.07					
3	49	50			0.37	0.03					
4	50	51			0.38	0.03					
5	51	52			0.93	0.05					
6	52	53			0.74	0.04					
7	53	54			0.19	0.02					
8	54	55			0.01	0.01					
9	55	56			0.13	0.01					
80	56	57			1.67	0.05					
1	57	58			1.24	0.06					
2	58	59			0.66	0.02					
3	59	60			0.72	0.01					
4	60	61			2.30	0.07					
5	61	62			0.55	0.02					

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/3

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 2450	2.37	0.08	D 0109	4.20	0.22	D 0108	2.27	0.075	D 0107	2.13	0.04
2475	0.93	0.05	0106	1.17	0.06	0105	1.21	0.04	0104	1.10	0.02
2538	0.95	0.02	0112	0.96	0.04	0111	1.08	0.035	0110	1.05	0.013
2532	1.33	0.06	0115	1.35	0.08	0114	1.39	0.075	0113	1.33	0.037
2526	0.73	0.02	0118	0.71	0.04	0117	0.86	0.045	0116	0.81	0.02
2484	2.30	0.07	0121	2.10	0.08	0120	2.21	0.065	0119	2.14	0.031
2457	0.43	0.04	0124	0.43	0.04	0123	0.54	0.03	0122	0.53	0.011
2537	1.80	0.07	0127	1.76	0.01	0126	1.83	0.09	0125	1.59	0.038
2463	1.53	0.09	0130	1.59	0.09	0129	1.58	0.08	0128	1.32	0.039
2469	1.94	0.10	0133	1.76	0.09	0132	1.83	0.07	0131	2.02	0.038

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/3

LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.			LAB.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 2455	See attached table		D 0291	1.70	0.07	D 0292	1.65	0.034			
D 2460	"	"	D 0297	1.03	0.065	D 0298	1.04	0.028			
D 2465	"	"	D 0293	1.26	0.08	D 0294	1.31	0.041			
D 2479	"	"	D 0299	0.19	0.02	D 0300	0.22	0.005			
D 2483	"	"	D 0295	0.76	0.025	D 0296	0.69	0.010			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/3 (left half of core).

SAMPLE No.	DEPTH (METRES)					ELEMENTS						COMMENTS
	From	To	Length	W ₃ Length	Mo. Recovered	W ₃	Mo	W ₃	Mo ₁	W ₃	Mo.	
D 2454	30	31	1.0	0.24	0.03	0.20	0.03	0.20	0.02	0.19	0.03	
5	31	32	"	1.38	0.08	1.62	0.09	1.54	0.09	1.67	0.10	
6	32	33	"	0.04	0.01	0.06	0.02	0.04	0.01	0.05	0.02	
7	33	34	"	0.44	0.04	0.43	0.04	0.44	0.04	0.41	0.03	
8	34	35	"	2.00	0.09	2.05	0.09	2.13	0.09	2.03	0.09	
9	35	36	"	2.25	0.07	2.25	0.08	2.26	0.07	2.26	0.08	
60	36	37	"	1.10	0.07	1.12	0.07	1.09	0.07	1.09	0.07	
1	37	38	"	1.12	0.07	1.12	0.07	1.14	0.07	1.11	0.07	
2	38	39	"	2.42	0.14	2.28	0.13	2.23	0.12	2.39	0.14	
3	39	40	"	1.57	0.09	1.49	0.09	1.58	0.09	1.47	0.09	
4	40	41	"	1.35	0.09	1.37	0.09	1.38	0.11	1.36	0.10	
5	41	42	"	1.33	0.09	1.30	0.09	1.23	0.08	1.39	0.09	
6	42	43	"	1.46	0.09	1.48	0.09	1.56	0.09	1.48	0.09	
7	43	44	"	1.32	0.08	1.33	0.08	1.27	0.08	1.24	0.08	
8	44	45	"	1.51	0.08	1.58	0.08	1.65	0.09	1.63	0.09	
9	45	46	"	1.92	0.11	1.55	0.09	1.95	0.10	1.53	0.08	
70	46	47	"	1.90	0.11	1.93	0.11	1.97	0.11	1.97	0.12	
1	47	48	"	2.49	0.13	2.50	0.11	2.61	0.11	2.64	0.13	
2	48	49	"	1.53	0.07	1.46	0.07	1.48	0.07	1.54	0.07	
3	49	50	"	0.33	0.03	0.39	0.03	0.38	0.03	0.36	0.03	
4	50	51	"	0.37	0.03	0.34	0.03	0.42	0.04	0.39	0.03	
5	51	52	"	0.96	0.05	0.92	0.05	0.91	0.05	0.91	0.05	
6	52	53	"	0.77	0.04	0.72	0.04	0.80	0.05	0.68	0.04	
7	53	54	"	0.20	0.02	0.16	0.02	0.23	0.02	0.16	0.02	
8	54	55	"	<0.01	0.01	<0.01	0.01	<0.01	0.01	<0.01	0.01	
9	55	56	"	0.13	<0.01	0.14	<0.01	0.12	<0.01	0.12	<0.01	

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/3 (left half of core)

SAMPLE No.	DEPTH (METRES)					ELEMENTS					COMMENTS
	From	To	Length	W ₃ Length Recovered	Mo	W ₃	Mo	W ₃	Mo	W ₃	
D 2480	56	57	1.0	1.92	0.04	1.38	0.04	1.90	0.05	1.48	0.06
1	57	58	"	1.29	0.06	1.17	0.06	1.27	0.06	1.23	0.07
2	58	59	"	0.72	0.01	0.67	0.01	0.62	0.02	0.61	0.02
3	59	60	"	0.66	0.01	0.74	0.02	0.74	0.01	0.72	0.01
4	60	61	"	2.37	0.07	2.25	0.07	2.55	0.06	2.33	0.07
D 2485	61	62	"	0.54	0.01	0.60	0.01	0.49	0.02	0.58	0.02

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 240/3 (right half of core).

SAMPLE No.	DEPTH (METRES)			ELEMENTS						COMMENTS	
	From	To	Length	WO ₃	Mo.	WO ₃	Mo	WO ₃	Mo	WO ₃	Mo.
D 2508	30	31	1.0	0.26	<0.01	0.22	<0.01	0.26	<0.01	0.20	<0.01
2526	31	32	"	0.81	0.02	0.75	0.02	0.62	0.01	0.73	0.02
2510	32	33	"	0.05	<0.01	0.05	<0.01	0.07	<0.01	0.04	<0.01
1	33	34	"	0.27	<0.01	0.29	<0.01	0.30	<0.01	0.29	<0.01
2535	34	35	"	4.0	0.12	4.1	0.14	3.5	0.11	3.8	0.13
2515	35	36	"	2.21	0.04	2.48	0.04	2.39	0.04	2.54	0.05
2514	36	37	"	1.19	0.04	1.28	0.05	0.98	0.03	1.24	0.04
2513	37	38	"	1.20	0.04	1.24	0.04	1.13	0.04	1.18	0.04
2516	38	39	"	1.10	0.04	1.14	0.04	1.11	0.04	1.17	0.02
7	39	40	"	0.37	<0.01	0.39	0.01	0.41	0.01	0.41	0.01
8	40	41	"	1.51	0.07	1.36	0.04	1.47	0.07	1.35	0.06
2532	41	42	"	1.20	0.05	1.38	0.06	1.34	0.07	1.40	0.07
2520	42	43	"	2.03	0.09	1.81	0.08	1.98	0.08	1.88	0.08
1	43	44	"	1.44	0.06	1.45	0.06	1.40	0.05	1.54	0.05
2	44	45	"	1.64	0.04	1.24	0.05	1.52	0.05	1.34	0.05
3	45	46	"	1.83	0.06	1.60	0.07	1.78	0.07	1.51	0.05
4	46	47	"	2.27	0.09	2.26	0.09	2.30	0.09	2.31	0.09
5	47	48	"	2.75	0.09	2.79	0.08	2.73	0.09	2.79	0.09
2509	48	49	"	2.11	0.05	2.17	0.05	2.14	0.05	2.15	0.04
2527	49	50	"	0.30	0.01	0.32	0.01	0.35	0.01	0.37	0.01
8	50	51	"	0.41	<0.01	0.55	0.01	0.55	0.01	0.58	0.01
2538	51	52	"	0.86	0.03	0.98	0.02	1.06	0.02	0.88	0.02
2530	52	53	"	0.74	0.01	0.72	0.01	0.73	0.01	0.71	0.02
1	53	54	"	0.39	0.06	0.39	0.06	0.38	0.06	0.42	0.06
2519	54	55	"	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2533	55	56	"	0.11	<0.01	0.12	<0.01	0.10	<0.01	0.09	<0.01
4	56	57	"	0.88	0.05	0.91	0.05	0.67	0.04	0.88	0.05
2512	57	58	"	1.73	0.04	1.71	0.04	1.71	0.04	1.71	0.04
2536	58	59	"	0.39	0.03	0.41	0.03	0.44	0.03	0.41	0.03
7	59	60	"	1.74	0.07	1.88	0.07	1.74	0.07	1.82	0.07
2529	60	61	"	2.29	0.10	2.37	0.10	2.36	0.11	2.45	0.12
D 2539	61	62	"	0.56	0.01	0.58	0.02	0.54	0.01	0.50	0.01

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/3

0 - 8.20

BIOTITE HORNFELS

A grey fine grained massive hornfels. No mineralisation. Abundant carbonate veining 4 - 6m with some core loss 4.88 - 5.69 42% core loss.

8.20 - 12.60

BIOTITE PYROXENE HORNFELS

A mottled grey green rock - no mineralisation. Indicative of B lens hornfels.

12.60 - 24.99

BIOTITE HORNFELS

Core is very poor quality 12.6 - 15.2 with abundant chlorite on joint surfaces. Many fracture surfaces appear slickensided and some movement may have occurred here.

Below 15.2 and down to 24.99 quality of core is good and the unit is a pale grey barren hornfels typical of C lens hangingwall biotite hornfels.

24.99 - 34.08

PYROXENE GARNET HORNFELS

Mottled green (ph) and pale pink (grossular garnet) with irregular patches of white carbonate. It is not a 'classical' pgh in appearance.

Weakly mineralised throughout. Some coarse scheelite 26.7 - 26.9

Quality of core is good with 100% core recovered.

34.08 - 53.04

GARNET HORNFELS

A medium grained brown andradite skarn with a faint green colouring probably indicating a higher than usual pyroxene content. The unit is highly mineralised as fine disseminated scheelite.

No bedding.

Quality of core is good with close to 100% core recovery achieved.

Towards the base - say below 49m the unit is more fine grained.

53.04 - 55.70

BIOTITE - PYROXENE HORNFELS

A barren banded brown (bh) and green (ph) rock. Bedding: 54m 50° LAOC.

GEOPEKO LIMITED - Dolphin MineGEOLOGICAL LOGD.D.H. NO. D 240/3

55.70 - 76.0

BANDED GARNET HORNFELS

Basically a brown andradite garnet skarn with barren green ~~slates~~ interbeds of pyroxene hornfels.

Bedding: 59m 45° LAOC.
63m 45° "

Broken ground 60.3 - 60.7 but no core loss and no chlorite or obvious slickensides.

Bedding: 67m 55° LAOC
71m 60° "
73m 50° "

The lower contact of this unit with the mineralised footwall beds below is arbitrary but is taken at the first appearance of barren white carbonate beds of substantial (+ 1cm) thickness.

76.0 - 81.69

MINERALISED BANDED FOOTWALL BEDS

Very similar in appearance to unit above except for carbonate bands up to 10cm wide.

Bedding: 76m 45° LAOC
80m 60° "

80.30 - 83.62

FAULT ZONE (?)

Core is badly broken RQD = 7% and there is considerable core loss notably,

80.47 - 81.69 54% lost
81.69 - 82.68 49% "
82.68 - 83.62 79% "

Abundant chlorite on joint and fracture surfaces.

83.62 - 86.40

UNMINERALISED BANDED FOOTWALL BEDS

Mainly a barren white marble with barren interbedded grey bh with minor green ph. Occasional brown grossular garnet beds up to 5mm wide.

Bedding: 83.7m 55° LAOC
86m 40° "

86.40 - 94.95

LOWER METAVOLCANICS

Pale grey homogeneous massive unmineralised flecked with pale brown spots (up to 1mm dia) of biotite (?).

94.95 metres E.O.H.

GEOPEKO LIMITED - KING ISLANDLOG OF D.D.H. NO:D 240/2

PLANNING Proposer: M. J. Danielson Depth: 100m
Location: 220 240E drill cuddy main decline

Purpose of hole: Oreblocking

Co-ordinates: 220 240 E 564 075 N

Inclination: -90° Target depth:

Bearing: 360° Grid $^{\circ}$ Magnetic

Target: E N

Approved by: M. C. Rogers Date: 1.7.74

SURVEY

Survey Co-ords: E N

Survey bearing: $^{\circ}$ Grid $^{\circ}$ Magnetic

Surveyed in by: Date:

Actual Co-ords: 220239.7 E 564077.0 N

R.L. of collar: -98.1 BRG $190^{\circ}56'$ Inclination of hole: -88.34°

Picked up by: M. G. Marchant Date: 23.7.74

SUMMARY

Logged by: M. J. Danielson

Results: C lens 25 -45 20m @ 1.80% WO_3
49 - 67 18m @ 0.90% WO_3

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 19.7.74

Date terminated: 25.7.74

Casing: Size : BX

Depth: 1.01

Core: Size : NQ

Depth: 1.01

BQ

100.41

Wedge Runoff:

Wedge placed:

Depth:

Proposed by:

Approved by:

Reason:

Extension:

Final depth: 100.41

Reason for termination: Hole passed into unmineralised basal hornfels

Condition of hole on completion:

Casing :

Cemented: Yes

Bore hole survey: Surveyed to 99.06m

Water: No significant changes in water pressure

Comments on drilling conditions:

Generally good ground conditions.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/2

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0.0 - 3.96	B lens hangingwall bh	10		carbonate		100	23	
3.96 - 13.54	bph/B lens	10		clay; chlorite @ 9.50m		98	59	
13.54 - 23.60	hangingwall bh/pgh	9		chlorite 13.74 - 16.0m		98	69	badly broken ground, 21.47 - 21.57M.
23.60 - 48.16	pgh/gh/ marble marker	4		clay; chlorite in zone of marble marker		100	89	
48.16 - 74.75	Lower C lens/ mineralised banded footwall beds	7		minor clay; carbonate @ 56.60m	53.5 45° 59 50° 63 50° 65 55° 69 60° 71 65° 74 50° L.A.O.C.	99	77	
74.75 - 86.46	mineralised banded footwall beds/lower volcanics	10		minor carbonate; chlorite @ 85.6m	77 50° 80 35° L.A.O.C.	103	67	badly broken ground, 75.44 - 75.59, 78.60 - 78.73
86.46 - 100.41	bh/banded bph	+20		chlorite	97 55° 99 45° L.A.O.C.	103	18	poor ground, core is highly fractured

FURTHER DATA & REMARKS (Compression Tests)

1. Core Size: 0 - 1.01 NQ 1.01 - 100.41 BQ
2. For detailed % core recoveries with each interval consult core recovery page.

CORE RECOVERY - DDH D 240/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.01	1.01	0.75	74
1.17	0.16	0.16	100
2.33	1.16	1.40	121
2.69	0.36	0.40	111
3.60	0.91	0.91	100
3.96	0.36	0.36	100
4.93	0.97	0.94	97
5.66	0.73	0.75	103
6.81	1.15	1.12	97
6.91	0.10	0.10	100
9.63	2.72	2.70	99
9.98	0.35	0.33	94
12.65	2.67	2.55	96
13.18	0.53	0.52	98
13.54	0.36	0.38	106
14.58	1.04	0.95	91
15.80	1.22	1.17	96
17.63	1.83	1.93	105
18.36	0.73	0.73	100
20.67	2.31	2.12	92
23.60	2.93	3.00	102
25.40	1.80	1.95	108
26.82	1.42	1.22	86
29.87	3.05	3.05	100
32.92	3.05	3.03	99
35.96	3.04	3.05	100
39.01	3.05	3.05	100
42.06	3.05	3.05	100
45.11	3.05	3.05	100
46.13	1.02	1.06	104
48.16	2.03	1.96	97
51.21	3.05	3.05	100
53.64	2.63	2.36	97
56.69	3.05	3.05	100
59.74	3.05	3.05	100
62.79	3.05	3.02	99
64.92	2.13	2.20	103
67.97	3.05	3.00	98
71.01	3.04	3.00	99
74.07	3.06	3.05	99
74.75	0.68	0.67	99
75.59	0.84	0.89	106
77.21	1.62	1.80	111
80.31	3.10	3.18	103
83.41	3.12	3.10	99
86.46	3.05	3.04	99
87.78	1.32	1.16	88
90.53	2.75	2.95	107
91.44	0.91	0.95	104
91.64	0.20	0.24	120
93.04	1.40	1.44	103
93.88	0.84	0.97	115
96.92	3.04	3.16	104
97.84	0.92	1.04	113
99.36	1.52	1.30	86
100.41	1.05	1.13	108

GEOPEKO LIMITED - DOLPHIN MINESUMMARY BORE HOLE SURVEY DATAD.D.H. NO.D 240/2

Survey method : Multishot Camera

Depth surveyed to : 99.06m

Final depth : 100.⁴¹~~20~~m

Date surveyed : 25.7.74

Casing depth : 1.52m

Surveyed by : V. Powell

Checked by : G. L. Buckland

DEPTH	Bearing		Inclination		True Vertical depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		N S	N W
0							
15.24	203.5°	194.5°	1.25°	-88.75°	15.24	0.32	0.05
30.48	232.5°	223.5°	1.75°	-88.25°	30.47	0.68	0.29
45.72	233°	224°	2°	-88°	45.71	0.99	0.58
60.96	238°	229°	2.5°	-87.5°	60.94	1.38	1.02
76.20	242.5°	233.5°	2.5°	-87.5°	76.16	1.79	1.54
91.44	246°	237°	2.75°	-87.25°	91.39	2.20	2.13
99.06	245°	236°	3.0°	-87°	99.01	2.42	2.46

REMARKS

GEOPEKO LIMITED - DOLPHIN MINEASSAY DATAD.D.H. NO. D 240/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
C 1988	6	7	1.0	1.0	0.01	<0.01					
9	7	8	"	"	0.79	0.03					
90	8	9	"	"	0.08	0.02					
1	9	10	"	"	0.02	<0.01					
2	10	11	"	"	0.11	0.01					
3	11	12	"	"	0.20	0.02					
1994	12	13	"	"	0.07	<0.01					
1995	23	24	"	"	<0.01	<0.01					
6	24	25	"	"	0.05	<0.01					
7	25	26	"	"	1.50	0.07					
8	26	27	"	"	4.0	0.18					
9	27	28	"	"	1.41	0.05					
2000	28	29	"	"	0.49	0.01					
D 2001	29	30	"	"	3.4	0.14					
2	30	31	"	"	1.42	0.06					
3	31	32	"	"	2.53	0.13					
4	32	33	"	"	1.87	0.09					
5	33	34	"	"	1.02	0.06					
6	34	35	"	"	1.72	0.09					
7	35	36	"	"	0.99	0.05					
x8	36	37	"	"	3.5	0.17					
9	37	38	"	"	3.1	0.12					
10	38	39	"	"	1.64	0.06					
1	39	40	"	"	0.90	0.04					
2	40	41	"	"	0.46	0.01					
3	41	42	"	"	1.33	0.04					
4	42	43	"	"	0.42	0.01					
5	43	44	"	"	2.78	0.11					
6	44	45	"	"	1.60	0.05					
7	45	46	"	"	0.02	<0.01					
8	46	47	"	"	0.03	<0.01					
9	47	48	"	"	0.45	0.02					
20	48	49	"	"	0.03	<0.01					
1	49	50	"	"	2.04	0.09					
2	50	51	"	"	1.78	0.07					
3	51	52	"	"	0.71	0.02					
4	52	53	"	"	0.56	0.02					
5	53	54	"	"	0.32	0.01					
6	54	55	"	"	0.57	0.02					
7	55	56	"	"	1.14	0.04					
8	56	57	"	"	0.44	0.01					
2029	57	58	"	"	1.45	0.04					

C lens
20m @
1.80% WO₃

SPECIFIC GRAVITY

Determined by:

Depth (m) :

GEOPEKO LIMITED - DOLPHIN MINEASSAY DATAD.D.H. NO. D 240/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo						
D 2030	58	59	1.0	1.0	1.43	0.05						
1	59	60	"	"	1.30	0.03						
2	60	61	"	"	1.28	0.05						
3	61	62	"	"	0.99	0.03						
4	62	63	"	"	0.37	<0.01						
5	63	64	"	"	0.26	<0.01						
6	64	65	"	"	0.70	0.01						
7	65	66	"	"	0.43	<0.01						
8	66	67	"	"	0.44	0.01						
9	67	68	"	"	0.21	<0.01						
40	68	69	"	"	0.01	<0.01						
1	69	70	"	"	0.24	<0.01						
2	70	71	"	"	0.49	<0.01						
3	71	72	"	"	1.85	0.06						
4	72	73	"	"	0.25	<0.01						
5	73	74	"	"	0.14	<0.01						
6	74	75	"	"	<0.01	<0.01						
7	75	76	"	"	<0.01	<0.01						
8	76	77	"	"	<0.01	<0.01						
9	77	78	"	"	<0.01	<0.01						
50	78	79	"	"	<0.01	<0.01						
1	79	80	"	"	0.26	<0.01						
2	80	81	"	"	0.04	<0.01						
3	81	82	"	"	0.27	<0.01						
4	82	83	"	"	0.32	<0.01						
2055	83	84	"	"	<0.01	<0.01						

C lens
18m @
0.90% WO₃

SPECIFIC GRAVITY

Determined by:

Depth (m) :

GEOPEKO LIMITED - KING ISLAND

NOTE: Core crushed to $\frac{1}{32}$ " dia.
before splitting and crushing.
Normal crushing size is $\frac{1}{8}$ " dia.

CHECK ASSAY DATA

D.D.H. D 240/2

LAB. K.I.S.			LAB. K.I.S.			LAB. K.I.S.			LAB. K.I.S.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 2008	3.5	0.17	D 2334	3.5	0.15	D 2358	3.50	0.15			
9	3.1	0.12	5	3.2	0.13	9	3.40	0.13			
10	1.64	0.06	6	1.60	0.06	60	1.58	0.06			
1	0.09	0.04	7	0.88	0.02	1	0.86	0.03			
2	0.46	0.01	8	0.47	0.01	2	0.48	0.01			
3	1.33	0.04	9	1.34	0.04	3	1.34	0.05			
4	0.42	0.01	40	1.64	0.04	4	1.62	0.05			
5	2.78	0.11	1	0.40	< 0.01	5	0.40	< 0.01			
6	1.60	0.05	2	0.01	< 0.01	6	0.01	< 0.01			
7	0.02	< 0.01	3	0.01	< 0.01	7	< 0.01	< 0.01			
8	0.03	< 0.01	4	0.03	< 0.01	8	0.02	< 0.01			
9	0.45	0.02	5	0.31	0.01	9	0.43	0.02			
20	0.03	< 0.01	6	2.67	0.10	70	2.66	0.11			
1	2.04	0.09	7	1.98	0.07	1	1.50	0.06			
2	1.78	0.09	8	1.16	0.06	2	1.79	0.07			

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/2

LAB. K.I.S.			LAB. K.I.S.			LAB. K.I.S.			LAB. K.I.S.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
D 2023	0.71	0.02	D2349	0.72	0.03	D2373	0.72	0.03			
4	0.56	0.02	50	0.56	0.02	4	0.53	0.02			
5	0.32	0.01	1	0.34	0.01	5	0.30	0.01			
6	0.57	0.02	2	0.56	0.02	6	0.54	0.02			
7	1.14	0.04	3	1.18	0.04	7	1.14	0.04			
8	0.44	0.01	4	0.34	0.01	8	0.44	0.01			
9	1.45	0.04	5	1.44	0.03	9	1.44	0.04			
30	1.43	0.05	6	1.40	0.04	80	1.44	0.05			
D 2031	1.30	0.03	D2357	1.14	0.03	D2381	1.24	0.03			

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/²

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
C 1993	0.20	0.02	D 0175	0.12	0.03	D 0174	0.19	0.02	D 0173	0.24	0.012
1997	1.50	0.07	0172	1.16	0.09	0171	1.83	0.08	0170	1.95	0.044
2007	0.99	0.05	0169	1.03	0.09	0168	1.08	0.065	0167	0.98	0.034
2036	0.70	0.01	0166	0.73	0.06	0165	0.76	0.04	0164	0.71	0.014
2046	0.01	0.01	0163	0.03	0.03	0162	0.03	0.015	0161	0.04	0.005
2054	0.32	0.01	0160	0.34	0.04	0159	0.37	0.025	0158	0.48	0.006

GEOPEKO LIMITED - DOLPHIN MINE

GEOLOGICAL LOG

D.D.H. NO D 240/2

00 - 3.96

B LENS HANGINGWALL BIOTITE HORNFELS

Barren fine grained grey biotite hornfels. Abundant carbonate on joint surfaces and minor carbonate veining.

Quality of core is fair. RQD = 23%.

3.96 - 5.80

BIOTITE-PYROXENE HORNFELS

Similar unit to that described above however approx. 50% of this unit is a pale green barren ph.

The unit is not banded. Minor carbonate veining and carbonate is common on fracture surfaces.

5.80 - 13.74

B LENS

The unit is a mixture of mineralogies but can be best described as a dominant pyroxene hornfels with some grossular and andradite garnet skarns weakly developed.

There is some coarse scheelite 6.95 - 7.20
7.55 - 7.80

Minor disseminated scheelite 10.8 - 12.5m.

13.74 - 22.0

HANGINGWALL BIOTITE HORNFELS

A fine grained purplish brown and grey rock. No mineralisation.

Chlorite on joint surfaces 13.74 - 16.0.

22.0 - 29.17

PYROXENE GARNET HORNFELS

Mostly a green pyroxene and pale pink grossular garnet rock with irregular patches of white carbonate not necessarily as ovoids.

Between 23.2 - 24.4 it is a greenish brown ph - bh with no grossular garnet or carbonate.

At 24.4m there is 10cms of broken ground with chlorite on joint surfaces.

This section is also barren.

The pgh unit is mineralised mostly with mineralised mostly with small (1cm) coarse grains of scheelite below 24.4m.

GEOPEKO LIMITED - DOLPHIN MINEGEOLOGICAL LOGD.D.H. NO.D 240/2

29.17 - 43.50

GARNET HORNFELS

Medium to coarse grained andradite garnet skarn containing high grade fine disseminated scheelite.

Quality of core is very good.

This unit becomes more pyroxene rich towards its base and scheelite grade diminishes. The contact of the garnet hornfels and underlying marble marker is almost an assay one as the pyroxene content of the gh increases to the extent to be called a ph.

43.50 - 47.18

MARBLE MARKER HORIZON

A variety of rock types as follows -

Pyroxene Hornfels 43.50 - 44.70

Barren green ph with some minor grossular garnet.

Biotite Hornfels 44.70 - 46.13

Barren dark grey bh. Bedding 45m 50° L.A.O.C.

Marble 46.13 - 47.18

Barren grey marble.

47.18 - 68.00

LOWER C LENS

Banded andradite skarn containing finely disseminated scheelite of lesser concentration than the Upper C lens.

Below 64m the percentage of unmineralised silicate hornfels beds and barren carbonate beds increases.

Bedding:	53.5m	45°	L.A.O.C.
	59.0m	50°	"
	63.0m	50°	"
	65.0m	55°	"
	69.0m	60°	"
	71.0m	65°	"

68.0 - 83.41

MINERALISED BANDED FOOTWALL BEDS

The contact of this unit with the overlying banded C lens arbitrary as one just grades in to the other.

Mineralisation becomes very patchy below 74m and scheelite is completely exhausted by 82m.

Bedding:	74m	50°	L.A.O.C.
	77m	50°	"
	80m	35°	"

GEOPEKO LIMITED - DOLPHIN MINEGEOLOGICAL LOGD.D.H. NO.D 240/2

83.41 - 86.90

LOWER VOLCANICS

A dark greenish grey rock with a weak volcanic texture. Medium to fine grained with no mineralisation. The rock is vaguely spotted with minute brown flecks - probably of biotite. This unit correlates with a similar unit in D 240/1.

86.80 - 91.85

BIOTITE HORNFELS

Badly broken black barren biotite hornfels. Some pyroxene and grossular garnet beds 82 -83m. Bedding 65° L.A.O.C.

91.85 - 92.0

APLITE

92.0 - 100.41

BANDED BIOTITE PYROXENE HORNFELS

Thinly banded black and green rock. No mineralisation. Quality of core is poor.

Moderate ph and some grossular garnet skarn 94.9 - 96.9. No mineralisation.

Bedding: 97m 55° L.A.O.C.
99m 45° L.A.O.C.

100.41

E.O.H.

GEOPEKO LIMITED - KING ISLANDLOG OF D.D.H. NO: D 240/1

PLANNING Proposer: M. J. Danielson Depth: 105m
Location: 220 240E Drill cuddy Main decline

Purpose of hole: Oreblocking

Co-ordinates: 220 240 E 564 077 N
Inclination: - 60 Target depth: 40m
Bearing: 360° °Grid °Magnetic
Target: E N
Approved by: M. C. Rogers Date: 1/7/74

SURVEY Survey Co-ords: E N
Survey bearing: °Grid °Magnetic
Surveyed in by: Date:

Actual Co-ords: 564077.7 ~~N~~ N 220239 ~~N~~ E

R.L. of collar: - 98.2 BRG 357°55' Inclination of hole: - 60°14'

Picked up by: M.G. Marchant Date: 23 July 74

SUMMARY Logged by: M. J. Danielson

Results: B lens - 12-15m 3m @ 0.63% WO₃

C lens - 51-60m 9m @ 1.01% WO₃

33-46m 13m @ 1.68% WO₃

62-72m 10m @ 0.55% WO₃

DRILLING Driller / Contractor: A.D.D.

Date commenced: 10.7.74 Date terminated: 19.7.74

Casing: Size : AX

Depth: 1.40

Core: Size : BQ

Depth: 1.40

AQ

92.61

Wedge Runoff:

Wedge placed: NIL

Depth:

Proposed by:

Approved by:

Reason:

Extension: NIL

Final depth: 92.61m

Reason for termination: Hole passed into unmineralised basal hornfels.

Condition of hole on completion:

Casing : 1.4m AX remains.

Cemented: Yes

Bore hole survey: Surveyed to 91.44

Water: No significant changes in water return.

Comments on drilling conditions:

Generally good ground conditions.

GEOPEKO LIMITED - DOLPHIN MINESUMMARY BORE HOLE SURVEY DATAD.D.H. NO. D 240/1

Survey method : Multishot Camera

Depth surveyed to : 91.44m

Final depth : 92.63m

Date surveyed : 19.7.74

Casing depth : 1.52m

Surveyed by : V. Powell

Checked by : G. Buckland

DEPTH	Bearing		Inclination		True Vertical depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	E
15.24	358°	349°	28.5°	-61.5°	13.40	7.13	1.39
30.48	354°	345°	27.25°	-62.75°	26.91	13.98	3.05
45.72	353.25°	344.25°	27.25°	-62.75°	40.46	20.70	4.92
60.96	352.5°	343.5°	27°	-63°	54.03	27.36	6.82
76.20	351.5°	342.5°	27°	-63°	67.61	33.97	8.88
91.44	349.5°	340.5°	26.25°	-63.75°	81.18	40.47	11.14

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/1

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 15.24	B lens hangingwall bh/B lens	11		white clay, minor carbonate		94	61	
15.24-18.59	B lens	17		minor carbonate chlorite @ 17.4m		83	50	bad ground 17.10-17.90m.
18.59-28.35	B/lens/bh /ph	12		chlorite on most surfaces; 4mm thick at 21.26 and 27.80. pyrite @ 24.20 25.35	55° @ 24.5m 45° @ 19.50m 40° @ 22.50m LAOC	99	59	
28.35-35.36	pgh/ gh	12		minor carbonate		87	63	see 2. below bad ground 34.0-34.5 core slightly leached: 34.0-35.50m. Fault?

FURTHER DATA & REMARKS (Compression Tests)

- Core size: 0 - 1.40 BQ (36.5mm dia).
1.40 - 92.61 AQ (26.0 mm dia).
- For detailed % core recoveries within each interval consult core recovery page.

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 240/1

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
35.36-49.80	gh/ marble marker.	6		carbonate @ 48.21 and 46.75 chlorite @ 48.50m.	45° LAOC @ 49.5m	95	88	bad ground 47.28 - 47.58
49.80-73.46	mineral- ized gph	12		minor carbon- ate, chlorite @ 54.30 61.25	54.5m:35° 57:45° 59:45° 63:50° 66:60° 69:45° 72:50° LAOC	92 (67.74 - 69.19:32%)	57	bad ground 55.77-56.17 64.40-64.74. 0.96m core ground away immediately above 69.19.
73.46-85.95	unmineral- ized banded footwall beds/ older volcanics	14		carbon- ate @ 79.0, chlorite @ 80.20 85.11	74m:50° 75m:60° 79m:50° LAOC	96	44	bad ground 75.70-75.90 77.24-77.57 78.44-78.64
85.95-92.61	older volcanics/ biotite actinolite hornfels.	20		chlorite 3mm thick @ 86.0; also @ 87.65 89.80m.	90m:50° 91m:55° LAOC	93	18	core badly broken through- out, very bad: 91.10-91.34 92.0-92.61m

FURTHER DATA & REMARKS (Compression Tests)

CORE RECOVERY - DDH D 240/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED	% CORE RECOVERY
0 - 0.61	0.61	0.56	92
1.40	0.79	0.57	72
3.35	1.95	1.87	96
4.67	1.32	0.94	71
7.03	2.36	2.36	100
8.84	1.81	1.82	101
9.42	0.58	0.55	95
11.23	1.81	1.82	101
11.76	0.53	0.54	101
12.62	0.86	0.78	91
13.26	0.64	0.61	95
15.24	1.98	1.95	98
18.14	2.90	2.63	91
18.59	0.45	0.16	36
21.26	2.67	2.46	92
21.72	0.86	0.63	137
22.81	1.09	1.00	92
25.35	2.54	2.60	102
27.58	2.23	2.30	103
28.35	0.77	0.68	88
31.47	3.12	3.12	100
34.21	2.74	2.16	79
35.36	1.15	0.82	71
38.33	2.97	3.08	104
41.58	3.25	3.03	93
42.14	0.56	0.57	101
44.81	2.67	2.58	97
47.78	2.97	2.51	85
48.22	0.43	0.44	102
50.90	2.69	2.62	97
53.95	3.05	3.05	100
56.77	2.82	2.77	98
58.80	2.03	2.00	99
61.87	3.07	2.95	96
63.55	1.68	1.50	89
65.28	1.73	1.51	87
67.74	2.46	2.42	98
69.19	1.45	0.46	32
71.42	2.23	2.10	94
72.24	0.82	0.81	99
73.46	1.22	1.12	92
74.47	1.01	1.05	104
75.29	0.82	0.81	99
76.71	1.42	1.36	96
77.57	0.86	0.80	93
78.33	0.76	0.68	89
78.64	0.31	0.32	103
80.16	1.52	1.36	89
81.38	1.22	1.12	92
84.43	3.05	3.10	102
85.95	1.52	1.33	88
87.48	1.53	1.51	99
88.22	0.74	0.72	97

89.10	0.88	0.61	69
89.38	0.28	0.32	114
90.52	1.14	1.14	100
91.57	1.05	1.01	96
92.00	0.43	0.30	70
92.38	0.38	0.32	84
92.61	0.23	0.23	100

GEOPEKO LIMITED - DOLPHIN MINEASSAY DATAD.D.H. NO D 240/1

SAMPLE NO.	DEPTH (METRES)			ELEMENTS						COMMENTS	
	From	To	Length	Length recovered	WO ₃	Mo					
1937	12	13	1.0	0.89	0.52	0.01					B lens 3m @ 0.63%
8	13	14	"	1.0	0.29	<0.01					
9	14	15	"	"	1.09	0.04					
1940	15	16	"	"	0.12	<0.01					
1941	28	29	"	"	<0.01	0.01					C lens 13m @ 1.68%
1943	29	30	"	"	0.12	0.01					
1942	30	31	"	"	0.22	0.01					
44	31	32	"	"	0.03	<0.01					
5	32	33	"	"	0.16	<0.01					
6	33	34	"	0.42	1.16	0.03					
7	34	35	"	0.68	1.64	0.04					
8	35	36	"	1.0	1.35	0.04					
9	36	37	"	"	1.58	0.05					
50	37	38	"	"	4.20	0.19					
1	38	39	"	"	2.28	0.10					
2	39	40	"	"	2.08	0.07					
3	40	41	"	"	1.40	0.12					
4	41	42	"	0.82	1.38	0.05					
5	42	43	"	1.0	0.56	0.04					
6	43	44	"	0.93	1.42	0.03					
7	44	45	"	1.0	2.24	0.09					
8	45	46	"	"	0.56	0.01					
9	46	47	"	"	0.03	<0.01					
1960	47	48	"	0.60	<0.01	<0.01					
1	48	49	"	1.0	<0.01	<0.01					
2	49	50	"	"	<0.01	<0.01					
3	50	51	"	"	0.18	<0.01					
4	51	52	"	"	0.41	0.02					
5	52	53	"	"	0.85	0.02					
6	53	54	"	"	1.34	0.05					
7	54	55	"	"	0.70	0.02					
8	55	56	"	"	1.14	0.04					
9	56	57	"	"	1.23	0.04					
70	57	58	"	"	1.32	0.05					
1	58	59	"	"	0.66	0.01					
x2	59	60	"	"	1.44	0.02					
3	60	61	"	"	0.12	<0.01					
4	61	62	"	0.90	0.06	<0.01					
5	62	63	"	1.0	0.42	0.01					
6	63	64	"	0.82	0.40	0.02					
7	64	65	"	0.78	0.66	0.02					
x8	65	66	"	1.0	0.49	0.01					
9	66	67	"	"	0.19	<0.01					

SPECIFIC GRAVITY

Determined by:

Depth (m) :

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 240/1

LAB. K.I.S.			LAB. K.I.S.			LAB. A.M.D.L.			LAB. A.C.S.L.		
Original Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.	Check Sample No.	WO ₃	Mo.
C 1937	0.52	0.01	D 0136	0.03	0.05	D 0135	0.06	0.035	D 0134	0.03	0.02
1939	1.09	0.04	0142	1.22	0.09	0141	1.11	0.065	0140	1.06	0.035
1942	0.22	0.01	0151	0.39	0.01	0151	0.35	0.035	0149	0.24	0.012
1953	1.40	0.12	0139	1.63	0.15	0138	1.64	0.17	0137	1.11	0.074
1964	0.41	0.02	0154	0.43	0.06	0153	0.55	0.04	0152	0.54	0.014
1972	1.44	0.02	0148	1.81	0.17	0147	1.77	0.045	0146	1.29	0.015
1978	0.49	0.01	0157	0.45	0.05	0156	0.55	0.035	0155	0.46	0.013
1984	0.40	0.01	0145	0.38	0.04	0144	0.52	0.03	0143	0.41	0.011

GEOPEKO LIMITED - DOLPHIN MINEGEOLOGICAL LOGD.D.H. NO. D 240/1

0.- 4.92

B LENS HANGINGWALL BIOTITE HORNFELS

A barren dark grey to purple biotite hornfels becoming more pyroxene rich towards the base. No apparent bedding.

4.92 - 19.30

B lens

A variety of rock types which can be subdivided as follows:-

Pyroxene Hornfels 4.92 - 8.50

A pale green barren ph.

Garnet pyroxene hornfels 8.50 - 13.26

A mixture of green ph and dark brown andradite and pale pink grossular garnet. No significant mineralization.

Core recovery:-

8.84 - 9.42	0.55	i.e.	95%
9.42 - 11.23	1.81		100
11.23 - 11.76	0.53		100
11.76 - 12.62	0.79		91
12.62 - 13.26	0.60		95

Garnet skarn 13.26 - 15.30

Mineralised dark brown andradite garnet skarn.

Core recovery:-

13.26 - 15.24	1.95m	i.e.	98%
---------------	-------	------	-----

Marble 15.30 - 16.80

A barren dirty grey marble, becoming more pyroxene rich with some grossular garnet from 16.3 - 16.8. The only mineralisation is an occasional speck of scheelite.

Core recovery:-

15.24 - 18.14	2.62	i.e.	91%
18.14 - 18.59	0.15		36%

Biotite hornfels 16.80 - 18.59

Mostly a heavily broken dark grey to black barren biotite hornfels. Some minor ph. The broken core commences at 16.80m so the core loss should be between 16.80 and 18.59m. Moderate chlorite on fracture surfaces.

18.59 - 23.50

HANGINGWALL BIOTITE HORNFELS

A barren pale grey biotite hornfels. No mineralisation.

Bedding: 19.50 45° LAOC
22.50 40° "

Between 21 - 23m some dark grey to black spotting has been elongated in the direction of bedding (?).

Core recovery:-

18.59 - 21.26	2.48	92%
21.72	0.62	13%
22.81	1.00	92%

GEOPEKO LIMITED - DOLPHIN MINEASSAY DATAD.D.H. NO.D 240/1

SAMPLE NO.	DEPTH (METRES)				ELEMENTS						COMMENTS
	From	To	Length	Length recovered	WO ₃	Mo					
80	67	68	1.0	1.0	0.54	0.02					
1	68	69	"	0.20	1.01	0.03					
2	69	70	"	0.81	0.75	0.02					
3	70	71	"	0.80	0.63	0.02					
4	71	72	"	1.0	0.40	0.01					
5	72	73	"	0.91	0.15	<0.01					
6	73	74	"	1.0	0.06	<0.01					
1987	74	75	"	"	0.02	<0.01					

SPECIFIC GRAVITY

Determined by:

Depth (m) :

GEOPEKO LIMITED - DOLPHIN MINEGEOLOGICAL LOGD.D.H. NO.D 240/1

23.50 - 26.50

BANDED BIOTITE HORNFELS/PYROXENE HORNFELS

A purplish brown biotite hornfels with abundant thin interbeds of a pale green ph. No mineralisation. Bedding: 23.5m 45°
24.3m 40°.

26.5 - 28.35

BIOTITE HORNFELS

Purplish brown barren biotite hornfels. No banding. Moderate chlorite on joint surfaces.

28.35 - 33.70

PYROXENE GARNET HORNFELS

Generally a typical pale green pyroxene hornfels with carbonate pods, mostly less than 3cm dia., and pale pink grossular garnet. Minor disseminated scheelite throughout.

33.70 - 47.45

GARNET HORNFELS

Medium to coarse grained dark brown andradite garnet skarn. Abundant disseminated scheelite.

Fault (?)

Core is badly broken and weakly leached between 33 - 36m with significant core loss. 33 - 35m 1.10m recovery ie. 55% core loss.

42.10 - 42.35 interbed of biotite and pyroxene hornfels.

Below 43m the skarn becomes more fine grained and more pyroxene rich with some grossular garnet beginning to appear.

The grade of scheelite mineralisation decreases in this section.

47.45 - 49.90

MARBLE MARKER

This marker horizon is unmineralised and consists of :

47.45 - 48.21 dark ~~to~~ grey to black biotite hornfels. The uppermost 20cm is a pale green ph. There is some broken core in this section with chlorite on fracture surfaces with core recovery:
47 - 48m 0.60 recov. = 60% core loss.

48.21 - 49.90 barren pale grey marble. Bedding 49.5m 45° L.A.O.C.

GEOPEKO LIMITED - DOLPHIN MINEGEOLOGICAL LOGD.D.H. NOD 240/1

49.90 - 73.10 LOWER C LENS

Mineralised garnet pyroxene hornfels. This skarn is more pyroxene and less andradite garnet rich than the upper C lens and carries less mineralisation.

Some bedding in the skarn begins to appear below 54m.

Bedding:	54.5m	35°	L.A.O.C.
	57.0	45°	"
	59.0	45°	"
	63.0	50°	"
	66.0	60°	"
	69.0	45°	"
	72.0	50°	"

The banded andradite garnet skarn with barren ph interbeds usually less than 2cm wide continues to 73.10m which also marks the base of the mineralisation.

73.10 - 81.78 UNMINERALISED BANDED FOOTWALL BEDS

This unit is a banded mixture of:
 white carbonate
 green pyroxene
 grey actinolite
 hornfels. There is only very minor grossular garnet.

The unit is unmineralised. The bh/ah is thinly (1cm) bedded.

Bedding:	73m	50°	L.A.O.C.
	74	55°	"
	75	60°	"
	79	50°	"

The ch bands are wider (up to 0.5m). Core is badly broken between 78.33 - 78.64m, with ~~7% core loss~~.

81.78 - 89.20 OLDER VOLCANICS

Pale grey green in colour with brown biotite spots. The whole of this unit has chlorite on fracture surfaces. See similar unit D 200/1 and D 200/2.

89.20 - 92.61 BIOTITE ACTINOLITE HORNFELS

Thinly banded dark grey and light grey hornfels. No mineralisation

Bedding	90m	50°	L.A.O.C.
	91m	55°	"

GEOPEKO LIMITED - DOLPHIN MINE

GEOLOGICAL LOG

D.D.H. NO. D 240/1

91.40 - 91.77 APLITE

Core is badly broken in this interval with abundant chlorite on fracture surfaces. Core loss:

2.61

E.O.H.