GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 075/2

PLANNING

PROPOSER: R. E. S. Davies DEPTH: 10 m

LOCATION: I12 Pit Dag top access

PURPOSE OF HOLE: Test Pit Dag Orebody

PROPOSED CO-ORDS: 220 075 E 563 995 N

INCLINATION: -50°

BEARING: 180° $^{\circ}$GRID $^{\circ}$MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 178° 30' $^{\circ}$GRID $^{\circ}$MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 075.0 E 563 977.1 N

R.L. OF COLLAR: -173.7

INCLINATION OF HOLE: -50° 41'

PICKED UP BY: R. Howman DATE: 22/5/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS:

DRILLING

DATE COMMENCED: 20/5/81 DATE TERMINATED: 24/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 7.5 m

REASON FOR TERMINATION: in biotite hornfels

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Not Surveyed

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 075/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.4	0.4	0.3	75
0.4 - 0.8	0.4	0.3	75
0.8 - 2.2	1.4	1.4	100
2.2 - 5.1	2.9	2.8	97
5.1 - 6.7	1.6	1.4	88
6.7 - 7.3	0.6	0.3	50
7.3 - ?7.5	0.2	0.2	100
EOH ?7.5 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 075/2

Summary

0.0 - 0.6 m Biotite Pyroxene Hornfels
0.6 - 2.2 Garnet Hornfels (banded)
2.2 - ?7.5 Biotite Hornfels

0.0 - 0.6 m BIOTITE PYROXENE HORNFELS

Thinly interbedded biotite pyroxene hornfels, bedding @ 90° to LCA. It is unmineralised.

0.6 - 2.2 m BANDED GARNET HORNFELS

Well mineralised unit with some large discrete crystals, overall grade approx. 0.7%.

Initially the unit has a disturbed structure and includes pyroxene hornfels and grossular garnet. Most of the remainder appears to be an albitised marble or aplite.

Although this unit is thought to be fault bounded no evidence to support, this can be found in the core.

2.2 - ?7.5 BIOTITE HORNFELS

Massive, dark, fine grained biotite hornfels, competant core except from 6 m on where it is broken into angular 3 - 7 cm fragments. Some pyroxene hornfels is present in thin section.

EOH ?7.5 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 075/1

PLANNING

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

LOCATION: I12 Pit Dag top access

PURPOSE OF HOLE: Test Pit Dag Orebody

PROPOSED CO-ORDS: 220 075 E 563 995 N

INCLINATION: -90°

BEARING: 0° °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 313° 35' °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 075.0 E 563 978.2 N

R.L. OF COLLAR: -173.8

INCLINATION OF HOLE: -88° 43'

PICKED UP BY: R. Howman DATE: 22/5/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: 2 - 18 m, 16 m @ 1.13% WO_3 L/C Pit Dag East

DRILLING

DATE COMMENCED: 10/5/81 DATE TERMINATED: 19/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 21.1 m

REASON FOR TERMINATION: In waste

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 075/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.4	0.4	0.3	75
0.4 - 0.75	0.35	0.2	57
0.75 - 1.1	0.35	0.35	100
1.1 - 1.4	0.3	0.1	33
1.4 - 2.0	0.6	0.5	83
2.0 - 2.5	0.5	0.4	80
2.5 - 4.9	2.4	2.2	92
4.9 - 7.0	2.1	2.1	100
7.0 - 9.0	2.0	2.0	100
9.0 - 10.7	1.7	1.7	100
10.7 - 13.0	2.3	2.3	100
13.0 - 14.9	1.9	1.5	79
14.9 - 16.5	1.6	1.5	94
16.5 - 18.9	2.4	2.4	100
18.9 - 19.9	1.0	1.0	100
19.9 - 21.1	1.2	1.1	92
EOH 21.1 m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 075/1

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 13240	0	1	1.0	1.0	0.13			
41	1	2	"	"	0.13			
42	2	3	"	"	1.8			
43	3	4	"	"	2.3			
44	4	5	"	"	2.4			
45	5	6	"	"	1.45			
46	6	7	"	"	0.77			
47	8	9	"	"	0.93			
48	8	9	"	"	0.80			
49	9	10	"	"	0.79			
50	10	11	"	"	0.56			
51	11	12	"	"	0.79			
52	12	13	"	"	0.75			
53	13	14	"	"	0.33			
54	14	15	"	"	1.7			
55	15	16	"	"	1.5			
56	16	17	"	"	0.53			
57	17	18	"	"	0.64			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 075/1

Summary

0.0 - 17.5 m gh (b)
17.5 - 21.1 m bph

0.0 - 17.5 m BANDED GARNET HORNFELS

Well bedded, generally competant unit of garnet hornfels, interbedded with pyroxene hornfels, biotite hornfels.

A 'granitised' or 'albitised rock' occurs from 4.3 - 5.0 m but is essentially unmineralised.

Only the andradite garnet bands are well mineralised but as they make up about 70% of the unit, the unit probably has an average grade of about 0.8%.

The core is mostly recovered in sticks of 15 - 20 cm long but many partings are fresh and obviously caused by drilling. The longest sticks are about 50 cm.

The core is well broken @ 14.9 m into angular pieces of 3-4 m diameter.

The unit grades stratigraphically into the unit below.

Bedding	is	@	35°	to LCA	@ 1.4 m
"			35	"	6.0 m
"			30	"	9.7 m
"			40	"	13.0 m
"			disturbed		15 - 17 m

The first 1.5 m of the unit are barren biotite pyroxene hornfels, the core although broken into 5 cm fragments does not show good evidence of faulting. However this rock may represent B Lens and the change in rock types be due to the Skua Fault.

17.5 - 21.1 m BIOTITE PYROXENE HORNFELS

Thinly interbedded biotite hornfels and pyroxene hornfels approximately 50% of each. The unit is unmineralised and is competant to 19.5 m. Beyond that it is locally quite broken, especially from 19.5 and 19.8 m, this may be the Cygnet fault.

EOH 21.1 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 070/3

PLANNING

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

LOCATION: I12 Pit Dag

PURPOSE OF HOLE: Define Skua Fault

PROPOSED CO-ORDS: 220 070 E 563 980 N

INCLINATION: -73^{o}

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

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0^{o} 51' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 070.1 E 563 980.4 N

R.L. OF COLLAR: 173.1

INCLINATION OF HOLE: -73^{o} 10'

PICKED UP BY: R. Howman DATE: 15/5/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS:

DRILLING

DATE COMMENCED: 13/5/81 DATE TERMINATED: 14/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 16.9 m

REASON FOR TERMINATION: Reached target depth

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 070/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.4	1.4	0.1	25
0,4 - 0.6	0.2	0.1	50
0.6 - 1.0	0.4	0.2	50
1.0 - 1.3	0.3	0.3	100
1.3 - 1.7	0.4	0.4	100
1.7 - 3.4	1.7	0.9	53
3.4 - 5.2	1.8	1.8	100
5.2 - 6.0	0.8	0.8	100
6.0 - 8.0	2.0	1.7	85
8.0 - 9.7	1.7	1.6	94
9.7 - 12.5	2.8	2.8	100
12.5 - 14.5	2.0	2.0	100
14.5 - 16.9	2.4	2.4	100
EOH 16.9 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D D 070/3

0.0 - 16.9 m B LENS

This unit consists of interbedded biotite hornfels and pyroxene hornfels and minor grossular garnet biotite hornfels pyroxene hornfels.

Most of the core is competant but broken ground occurs @ 3.4 m, 5.2 m, 8.8 m, 12.3 - 12.8 m.

Small amounts of scheelite occur @ 0.7 m, 2m and from 5.1 - 5.7 m.

Bedding is mostly regular but is disturbed @ 5.2 and 10 m. 6.5 m.

Bedding is @	0°	to LCA @ 1.8 m
"	30	3.8
"	45	6.0
"	45	7.5
"	40	11.0
"	50	16.8

EOH 16.9 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 070/2

PLANNING

PROPOSER: R. E. S. Davies DEPTH: 15 m

LOCATION: I12 Pit Dag

PURPOSE OF HOLE: Test Skua Fault and Pit Dag Orebody

PROPOSED CO-ORDS: 220 070 E 563 980 N

INCLINATION: -90^{o}

BEARING: 0^{o} ^{o}Grid ^{o}Mag

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 215^{o} 53' ^{o}Grid ^{o}Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 070.0 E 563 980.2 N

R.L. OF COLLAR: R-173.0

INCLINATION OF HOLE: -89^{o} 24'

PICKED UP BY: R. Howman DATE: 15/5/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: 5 - 15 m, 10 m @ 1.06% WO_3 gh (b) Pit Dag East

DRILLING

DATE COMMENCED: 4/5/81 DATE TERMINATED: 10/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 18 m

REASON FOR TERMINATION: Passed through Orebody

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 070/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.25	0.25	0.2	80
0.25 - 0.7	0.45	0.3	67
0.7 - 1.0	0.3	0.3	100
1.0 - 1.3	0.3	0.3	100
1.3 - 1.8	0.5	0.5	100
1.8 - 3.5	1.7	1.6	94
3.5 - 4.1	0.6	0.6	100
4.1 - 5.9	1.8	1.8	100
5.9 - 7.8	1.9	1.9	100
7.8 - 9.3	1.5	1.5	100
9.3 - 9.9	0.6	0.5	83
9.9 - 10.4	0.5	0.4	80
10.4 - 11.7	1.3	1.3	100
11.7 - 13.4	1.7	1.7	100
13.4 - 15.1	1.7	1.7	100
15.1 - 16.2	1.1	1.1	100
16.2 - 18.0	1.8	1.7	94
EOH 18.0 m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 070/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 13207	0	1	1.0	1.0	0.18			
08	1	2	"	"	0.16			
09	2	3	"	"	0.13			
10	3	4	"	"	0.13			
11	4	5	"	"	0.14			
12	5	6	"	"	3.30			
13	6	7	"	"	1.19			
14	7	8	"	"	1.19			
15	8	9	"	"	0.99			
16	9	10	"	"	0.75			
17	10	11	"	"	0.66			
18	11	12	"	"	0.64			
19	12	13	"	"	0.49			
20	13	14	"	"	0.64			
21	14	15	"	"	0.70			
22	15	16	"	"	0.27			
23	16	17	"	"	0.10			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 070/2

Summary

0.0 - 4.5 m	B Lens
4.5 - 15.8 m	Banded Garnet Hornfels
15.8 - 18.0 m	Biotite Hornfels/Pyroxene Hornfels

0.0 - 4.5 m B LENS

This unit is an interbedded unit of biotite hornfels and pyroxene hornfels, sometimes chaotic and carrying sparse scheelite. Some grossular is present @ 1.9 m.

From 3.5 - 4 m the rock is broken into fragment of 1 - 4 cm length, contrasting to the more normal 5 - 20 cm.

Bedding	is	@	50°	to	LCA	@ 1.1 m
"			55		"	3.6 m

4.5 - 15.8 BANDED GARNET SKARN

Typical well banded garnet hornfels containing andradite skarn, pyroxene hornfels with minor marble and biotite hornfels.

There is no sharp break with the overlying B Lens but the initial 80 cm is an albitised/granitised replaced marble as seen elsewhere in the Pit Dag Orebody. It is dominated by cream, amorphous feldspars set in a biotite hornfels pyroxene hornfels matrix. Discrete large scheelite crystals are rarely present.

The section from 9 - 10.6 cm is quite badly broken into 1 cm fragments. The remainder of the core occurs as sticks 10 - 40 cm long.

Bedding	is	from 1 - 15 cm thick and is				
		@	15°	to	LCA	@ 7.0 m
"			20		"	8.2 m
"			40		"	10.2 m
"			60		"	15.0 m

15.8 - 28.0 BIOTITE HORNFELS/PYROXENE HORNFELS

Interbedded, unmineralised, competant biotite hornfels and pyroxene hornfels unit, with biotite hornfels pyroxene hornfels and layers 0.1 - 20 cm thick.

It has a stratigraphic contact with the banded garnet hornfels.

EOH 18.0 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 070/1

PLANNING

PROPOSER: R. E. S. Davies DEPTH: 30 m

LOCATION: I12 Pit Dag

PURPOSE OF HOLE: Test Skua Fault

PROPOSED CO-ORDS: 220 070 E 563 980 N

INCLINATION: -45°

BEARING: 360° °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 1° 12' °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 070.1 E 563 981.3 N

R.L. OF COLLAR: -173.2

INCLINATION OF HOLE: -44° 36'

PICKED UP BY: R. Howman DATE: 15/5/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: No economic Mineralisation

DRILLING

DATE COMMENCED: 23/4/81 DATE TERMINATED: 3/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 24.4 m

REASON FOR TERMINATION: M5 rig could not drill any further.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 070/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.1	0.1	0.05	50
0.1 - 0.3	0.2	0.1	50
0.3 - 0.85	0.55	0.4	73
0.85 - 1.3	0.45	0.4	89
1.3 - 2.2	0.9	0.8	89
2.2 - 3.0	0.8	0.7	88
3.0 - 3.5	0.5	0.4	80
3.5 - 6.0	2.5	2.4	96
6.0 - 7.0	7.0	1.0	100
7.0 - 9.1	2.1	2.1	100
9.1 - 9.3	0.2	0.15	75
9.3 - 11.4	2.1	2.1	100
11.4 - 12.0	0.6	0.5	83
12.0 - 13.5	1.5	1.2	80
13.5 - 14.5	1.0	1.0	100
14.5 - 17.7	3.2	3.2	100
17.7 - 18.7	1.0	0.9	90
18.7 - 19.5	0.8	0.8	100
19.5 - 21.2	1.7	1.7	100
21.2 - 22.6	1.4	1.4	100
22.6 - 24.4	1.8	1.8	100
EOH 24.4 m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 070/1

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 13201	2	3	1.0	1.0	0.49			
02	4	5	"	"	0.13			
03	10	11	"	"	0.33			
04	20	21	"	"	0.28			
05	21	22	"	"	0.27			
06	24	25	"	"	0.35			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 070/1

0.0 - 24.4 m B LENS

This unit consists of interbedded biotite hornfels and pyroxene hornfels with rare garnet hornfels, grossular > andradite.

Thin beds of mineralised andradite skarn occur @ 2.2 m, 4.2 m, 10.4 m, and between 20.3 and 24.2 m.

The core is dominantly black fine grained pyroxene hornfels with subsidiary pyroxene hornfels interbedded, usually regularly but structure is chaotic @ 0 - 7 m, 17 - 19 m.

Although much of the core is strong and competant the longer sticks (20 - 40 cm) are usually seperated by regions of broken angular core which may be of any lithology.

These regions of broken core are from 5 - 80 cm long.

Bedding	is	@	25°	to LCA	@ 1.5 m
"			0	"	6.0 m
"			35	"	8.5 m
"			35	"	10.4 m
"			55	"	15.7 m
"			75	"	20.0 m
"			55	"	23.0 m

EOH 24.4 m

Hole abandoned becuase only M5 rig was being used.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 065/2

PLANNING

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

LOCATION: Il2 Pit Dag top access

PURPOSE OF HOLE: Test Pit Dage Orebody

PROPOSED CO-ORDS: 220 065 E 564 979 N

INCLINATION: -50°

BEARING: 180° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 183° 17' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 065.02 E 563 992.45 N

R.L. OF COLLAR: -172.48

INCLINATION OF HOLE: -49° 08'

PICKED UP BY: R. Howman DATE: 30/6/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS:

DRILLING

DATE COMMENCED: 26/6/81 DATE TERMINATED: 30/6/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 20.5 m

REASON FOR TERMINATION: Attained planned depth.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 065/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.0	3.0	2.0	66
3.0 - 6.9	3.9	3.8	97
6.9 - 8.4	1.5	1.5	100
8.4 - 9.5	1.1	1.1	100
9.5 - 11.2	1.7	1.7	100
11.2 - 13.0	1.8	1.8	100
13.0 - 15.0	2.0	2.0	100
15.0 - 17.5	2.5	2.5	100
17.5 - 20.5	3.0	3.0	100
EOH 20.5 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 065/2

Summary

0.0 - 8.7 m Marble
8.7 - 20.5 m Biotite Hornfels/Garnet Pyroxene Hornfels

0.0 - 8.7 m

MARBLE

A fresh grey well bedded marble with some pyroxene hornfels alteration rare specks of scheelite are present.

Bedding is @ 35° to LCA @ 4.0 m

8.7 - 20.5

BIOTITE HORNFELS/GARNET PYROXENE HORNFELS

A mixed and rather distrubed unit. It has a gradational contact with the marble and similar bedding angles initially. However bedding becomes disturbed from 13 m on and is virtually 11 to LCA @ 19 m.

Broken core from 12.7 - 14.0 m may represent faulting although no rock type change occurs.

The first 5 m are predominantly pyroxene hornfels with secondary feldspars but this changes to interbedded biotite hornfels and garnet hornfels in the latter half.

This section does contain significant, but sub-ore grade scheelite.

This whole unit has the general appearance of B Lens rather than lower C Lens.

Bedding is @	37°	to LCA @	12.2 m
"	55		14.5 m
"	10		18.5 m

EOH 20.5 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 065/1

PLANNING

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

LOCATION: Il2 Pit Dag top access

PURPOSE OF HOLE: Test Pit Dag Orebody

PROPOSED CO-ORDS: 220 065 E 563 979 N

INCLINATION: -85°

BEARING: 180° $^{\circ}$GRID $^{\circ}$MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 244° 8' $^{\circ}$GRID $^{\circ}$MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 065.25 E 563 993.63 N

R.L. OF COLLAR: 172.18

INCLINATION OF HOLE: 87° 53'

PICKED UP BY: R. Howman DATE: 2/7/81

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS:

DRILLING

DATE COMMENCED: 21/5/81 DATE TERMINATED: 30/5/81

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

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 17.9 m

REASON FOR TERMINATION: Reached target depth

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: No

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 065/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.4	0.4	0.4	75
0.4 - 0.6	0.2	0.1	50
0.6 - 0.8	0.2	0.05	25
0.8 - 1.0	0.2	0.2	100
1.0 - 1.2	0.2	0.2	100
1.2 - 1.4	0.2	0.2	100
1.4 - 1.8	0.4	0.4	100
1.8 - 3.4	1.6	1.6	100
3.4 - 5.8	2.4	2.4	100
5.8 - 8.8	3.0	3.0	100
8.8 - 10.6	1.8	1.7	94
10.6 - 12.2	1.6	1.5	94
12.2 - 13.6	1.4	1.2	86
13.6 - 16.6	3.0	3.0	100
16.6 - 17.9	1.3	1.1	85
EOH 17.9 m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 065/1

0.0 - 17.9 m B LENS

A well bedded sequence of marble/biotite hornfels and pyroxene hornfels with a few flecks of scheelite present @ 1.2 m, 5.7 and 16.7 m.

To 7.0 m the lithology is dominantly marble with minor pyroxene hornfels alteration, the remainder is biotite hornfels with interbedded subsidiary pyroxene hornfels. Some local patches of grossular garnet are present in this section.

Most of the marble is good ground but a number of clay of broken core occurs biotite hornfels/pyroxene honrfels unit, notably @ 8 - 8.8 m, 10.5 - 10.6 m, 11.8 - 12.5 m, 13.4 - 13.6 m, 16.2 m.

Bedding is @	45°	to LCA @ 2.4 m
"	65	4.8 m
"	50	8.2 m
"	50	12.4 m
"	50	15.6 m
"	40	17.8 m

EOH 17.9 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/6

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Access Drive

PURPOSE OF HOLE: Definition Pit Dag Orebody and location of fault offsetting Swan Fault.

PROPOSED CO-ORDS: 220 067 E 563 950 N

INCLINATION: horizontal

BEARING: 105 °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 109° 28' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 066.6 E 563 994.6 N

R.L. OF COLLAR: -170.1

INCLINATION OF HOLE: -0° 04'

PICKED UP BY: W. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 14-18 m, 4 m @ 1.47% WO_3

DRILLING

DATE COMMENCED: 6/3/79 DATE TERMINATED: 12/3/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 21.30

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 21.30

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED:

BORE HOLE SURVEY: Single Shot

WATER: Nil

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/6

Surveyed method: Single Shot
Final depth: 21.30 m
Casing depth: 1 m

Depth surveyed to: 20.20 m
Date surveyed: 10/3/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	E
20.20	110	100	90°	0°	0°	3.51	19.89

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 060/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.4 m	2.4	2.4	100
2.4 - 3.75	1.35	1.35	100
3.75 - 6.78	3.03	3.03	100
6.78 - 9.70	2.92	2.92	100
9.70 - 12.75	3.05	3.05	100
12.75 - 14.90	2.15	2.15	100
14.90 - 15.50	0.6	0.6	100
15.50 - 16.40	0.9	0.9	100
16.40 - 17.22	0.82	0.82	100
17.22 - 19.12	1.90	1.90	100
19.12 - 20.10	0.98	0.98	100

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 060/6

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9678	0	1	1.0	1.0	0.04	0.01		
79	1	2	"	"	0.01	0.01		
80	2	3	"	"	0.05	0.01		
81	3	4	"	"	0.07	0.01		
82	4	5	"	"	0.70	0.01		
83	5	6	"	"	0.18	0.01		
84	6	7	"	"	0.01	0.01		
85	7	8	"	"	0.01	0.01		
86	8	9	"	"	0.04	0.01		
87	9	10	"	"	0.28	0.01		
88	10	11	"	"	0.12	0.01		
89	11	12	"	"	0.01	0.01		
90	12	13	"	"	0.01	0.01		
21	13	14	"	"	0.03	0.01		
92	14	15	"	"	0.95	0.01		
93	15	16	"	"	0.98	0.01		
94	16	17	"	"	1.80	0.02		
95	17	18	"	"	2.15	0.04		
96	18	19	"	"	0.03	0.01		
97	19	20	"	"	0.52	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/6

0.0 - 1.80m **BIOTITE HORNFELS** minor pyroxene and grossular

Fine grained, dark brown biotite hornfels with minor grossular garnet and pyroxene hornfels. This could belong to B-lens, or it is the biotite hornfels above B-lens.

Bedding is almost parallel to the LCA at 0 - 5° to LCA.

1.80 - ?12,85 **B-LENS**

B-lens consisting of the following subdivisions - 1.80 - 9.40m.
Marble - Typical coloured marbles with minor patches and zones of grossular and pyroxene.

Broken core (probable fault parallel to LCA) occurs from 4.0 - 4.5m. Very little scheelite present.

Bedding 8° to LCA at 5.5m
Bedding 6° 9.0m

9.40 - 12.85m Pyroxene Hornfels. Green coloured pyroxene hornfels grading into a pyroxene - quartz 'intrsive' rock type from 12.0 - 12.85m.

B-lens marble appear to be replaced by the pyroxene hornfels, and at the top of the unit grossular garnet is common.

Bedding is not as shallow as that in the marbles -

Bedding 66° to LCA at 9.9m
Bedding 54° 10.10m

Broken core occurs around 12.75m Very minor scheelite is present but 0.1% WO_3

12.85 - 14.0 **BIOTITE HORNFELS**

Fractured and broken biotite hornfels with minor pyroxene hornfels/ actinolite hornfels. No scheelite is present. The unit appears somewhat sheared.

14.0 - ?16.60 **SKARN - BANDED**

Andradite skarn with fine disseminated scheelite and numerous zones of pyroxene hornfels. The core is badly broken throughout, particularly around 14.9m. Carbonate veining and sulphides are common.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/6

?16.60 - 19.0 BANDED FOOTWALL BEDS

Well bedded/banded unit consisting of marble pyroxene hornfels and grossular garnet. Minor scheelite is present.

Bedding is almost parallel to the LCA ie 18 - 19m.

A major carbonate vein (shear?) occurs around 16.8m.

The core is broken throughout, particularly at the base of the unit.

19.0 - 19.70 FAULT ZONE

Badly broken, brecciated and rubbly fault zone with minor disseminated scheelite present.

19.70 - 20.10 MARBLE

Dark grey carbonate rich rock with abundant pyrite (some chalcopyrite?). A moderate amount of coarse scheelite mineralisation.

EOH 20.10 m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/5

PLANNING

PROPOSER: **G. J. Bujtor** DEPTH:

LOCATION: **I12 Access Drive**

PURPOSE OF HOLE: **To Locate Fault offsetting the Swan Fault**

CO-ORDS: **220060** E **564000** N

INCLINATION: **Horizontal**

BEARING: **045** ^{o}GRID ^{o}MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: **40^{o} 42'** ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: **220061.3** E **564000.5** N

R.L. OF COLLAR **-169.9**

INCLINATION OF HOLE **0^{o} 14'**

PICKED UP BY: **B. Davies** DATE: **8/3/79**

SUMMARY

LOGGED BY: **G. J. Bujtor**

RESULTS: **12-15m, 3m @ 1.62% WO_3**

DRILLING

DATE COMMENCED: **1/3/79** DATE TERMINATED: **1/3/79**

DRILLER/CONTRACTOR: **ADD**

CASING: SIZE:
DEPTH:

CORE: SIZE: **46TT**
DEPTH: *25·27m*

WEDGE PLACED: **Nil** DATE:

EXTENSION: **Nil**

FINAL DEPTH: *25·27m*

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: **Single shot**

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. **D 060/5**

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.77	2.7	2.7	100
2.77 - 4.80	2.03	2.03	100
4.80 - 7.27	2.47	2.47	100
7.27 - 10.27	3.0	3.0	100
10.27 - 13.27	3.0	3.0	100
13.27 - 15.64	2.37	2.37	100
15.64 - 18.60	2.96	2.96	100
18.60 - 20.30	1.7	1.7	100
20.3 - 23.3	3.0	3.0	100
23.3 - 25.27	1.97	1.97	100
EOH 25.27m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. **D 060/5**

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 8.95m	**B lens**	**12-13**		**Chl/clay/carb**			**42**	
8.95 - 9.0	**FAULT**							
9.0 - 18.50	**L/C, Bfb**	**12**		**Chl/clay/carb sulph**			**70**	
18.50 - 25.27	**Bh/Ph**	**7-11**		**Chl/clay/carb sulph**			**69**	
22.6 - 22.8	**FAULT**							
EOH 25.27m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. **D 060/5**

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9620	0	1	1.0	1.0	<0.01	<0.01		
21	1	2	"	"	<0.01	<0.01		
22	2	3	"	"	0.09	0.01		
23	3	4	"	"	<0.01	0.01		
24	4	5	"	"	0.10	0.01		
25	5	6	"	"	<0.01	0.01		
26	6	7	"	"	<0.01	<0.01		
27	7	8	"	"	0.07	<0.01		
28	8	9	"	"	<0.01	<0.01		
29	9	10	"	"	<0.01	<0.01		
30	10	11	"	"	0.02	<0.01		
31	11	12	"	"	0.02	<0.01		
32	12	13	"	"	3.1	0.07		
33	13	14	"	"	1.38	0.04		
34	14	15	"	"	0.39	0.01		
35	15	16	"	"	0.16	<0.01		
36	16	17	"	"	0.01	<0.01		
37	17	18	"	"	0.88	0.01		
38	18	19	"	"	0.13	<0.01		
39	19	20	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/5

0.0 -8.95M **B-LENS**

Dominantly grey to white coloured marbles with minor pyroxene hornfels/grossular garnet and biotite hornfels from 7.25 - 8.95m.

Minor patchy scheelite mineralisation is present. The core is quite fractured and broken with numerous chloritic clayey zones, often parallel to the long core axis.

Bedding 33° to LCA at 5.5m
Bedding 32° 6.0m.

8.95 0 9.0 **FAULT ZONE**

Sheared chlorite pug fault zone with minor carbonate. The biotite hornfels on both sides of the fault are somewhat 'schistose' and disturbed.

9.0 - ?15.0 **LOWER C LENS - QUARTZ - PYROXENE ROCK**

Originally lower C-lens replaced or intruded by a quartz - pyroxene rock carrying variable scheelite, sulphides (pyrite, chalcopyrite and pyrrhutite). The unit is slightly magnetic.

Bedding is evident, and andradite skarn is mainly concentrated towards the base of the unit from 14-15m. Biotite hornfels occurs at the top of the unit adjacent to the fault.

Bedding 56° to LCA at 11.5m
Bedding 50° 12.65m
Bedding 35° 14.9m

?15.0 - 18.50 **BANDED FOOTWALL BEDS**

Ratchily mineralised Banded footwall beds consisting of abundant pyroxene and grossular garnet. Bedding is disturbed in places

Bedding 34° to LCA at 17.90m

18.50 - 25.27 **BIOTITE HORNFELS/PYROXENE HORNFELS**

Well bedded Biotite hornfels/pyroxene hornfels, which is coarse grained than the normal biotite hornfels/pyroxene hornfels and has a more silky sheen ('schistose' - like).

Bedding is very much disturbed with abundant faulting and microfaulting. No scheelite mineralisation is present. A possible fault occurs around 19.0; a major fault with breccia and open vughs occurs around 22.6 - 22.8m.

Bedding 48° to LCA at 18.6m
Bedding 37° to LCA at 24.30m

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/5

Survey method: Single shot
Final depth: 25.50m
Casing depth: Nil

Depth surveyed to: 6m
Date surveyed: 2/3/79
Surveyed to: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
6m	41°	31°	90	-0°	0	5.14	3.09
25.50	41°	31°	90	-0°	0	21.80	13.13

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/4

PLANNING

PROPOSER: G. J. Bujtor DEPTH: 20m

LOCATION: I12 Access Drive

PURPOSE OF HOLE: Locate Southern Orebody and Define Pit Dag Orebody

CO-ORDS: 220 060 E 564000 N

INCLINATION: 0^{o}

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

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 86^{o} 17' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 062.2 E 563999.6 N

R.L. OF COLLAR -170.0

INCLINATION OF HOLE -0^{o} 02'

PICKED UP BY: B. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: No Significant Mineralisation

DRILLING

DATE COMMENCED: 17/2/79 DATE TERMINATED: 19/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: Nil
DEPTH:

CORE: SIZE: 46TT
DEPTH: 20.0m

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 20.0m

REASON FOR TERMINATION: Intersected Barren Biotite hornfels/Pyroxene hornfels

CONDITION OF HOLE ON COMPLETION:

CASING: Open

CEMENTED:

BORE HOLE SURVEY: Surveyed at 20m

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/4

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
0	86°17'			-0° 02'	0	0	0
10	86.0	76.0	89.25	-0.75	0.13	0.65	9.98
20	86.0	76.0	89.25	-0.75	0.26	1.35	19.96
EOH	20.0						

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 060/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.2	1.2	1.2	100
1.2 - 2.6	1.4	1.4	100
2.6 - 4.6	2.0	2.0	100
4.6 - 5.82	1.22	1.22	100
5.82 - 7.12	1.30	1.30	100
7.12 - 8.30	1.18	1.18	100
8.30 - 9.72	1.42	1.42	100
9.72 - 10.77	1.05	1.05	100
10.77 - 11.65	0.88	0.88	100
11.65 - 12.80	1.15	1.15	100
12.80 - 15.0	2.2	2.2	100
15.0 - 18.0	3.0	3.0	100
18.0 - 20.0	2.0	2.0	100
EOH 20.0m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 060/4

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9496	0	1	1.0	1.0	0.08	0.01		
97	1	2	"	"	0.23	0.01		
98	2	3	"	"	0.06	<0.01		
99	3	4	"	"	0.09	0.01		
9500	4	5	"	"	0.02	0.01		
01	5	6	"	"	0.01	0.01		
02	6	7	"	"	0.07	0.01		
03	7	8	"	"	0.06	0.01		
04	8	9	"	"	0.01	0.01		
05	9	10	"	"	<0.01	0.01		
06	10	11	"	"	0.06	<0.01		
07	11	12	"	"	0.20	0.01		
08	12	13	"	"	0.02	<0.01		
09	13	14	"	"	0.20	0.01		
10	14	15	"	"	0.16	0.02		
11	15	16	"	"	0.05	0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 060/4

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 12.0	B lens	8		Chl/clay/carb.	36: 5m	100	62	
12.0 - 12.1	FAULT ZONE							
12.1 - 20.0	Bh/Ph	4-10		Chl/carb/Qtz sulph	80: 13 0: 17	100	77	
EOH 20.0m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/4

0.0 - 12.0m **B LENS - MARBLES**

Typical grey to whitish coloured marbles with only minor specks of scheelite mineralisation.

Minor grossular garnet occurs from 11 - 12m as well as minor pyroxene.

Bedding 36^{o} to LCA at 5.0m

12.0 - 12.10 **FAULT ZONE**

Very chloritic, schistose - like rock with abundant slickensides. No obvious breccia.

12.10 - 20.0 **BIOTITE HORNFELS/PYROXENE HORNFELS**

Originally a Biotite hornfels/pyroxene hornfels unit, but now contain abundant intrusive? quartz-pyroxene (?amphibole)-pyrite rock (which in D 060/4 was the host for most of the scheelite mineralisation).

Bedding is disturbed throughout (eg EOH)

?Bedding 80^{o} to LCA at 13.0m
?Bedding 0^{o} to LCA at 17.0m

Rare specks of scheelite are present.

EOH 20.0m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 060/4

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9497	0.23	0.01	11862	0.24	<0.01	11863	0.25		11864	0.18		
9507	0.20	0.01	11865	0.23	<0.01	11866	0.17		11867	0.15		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/3

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Access Drive

PURPOSE OF HOLE: To Define Pit Dag Orebody

CO-ORDS: 220 060 E 564000 N

INCLINATION:

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

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0^{o} 32'^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 22058.4 E 564001.91 N

R.L. OF COLLAR -170.3

INCLINATION OF HOLE -44^{o} 31'

PICKED UP BY: B. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Banded Lower C 10-14m, 4m @ 0.73% WO_3

DRILLING

DATE COMMENCED: 7/2/79 DATE TERMINATED: 9/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: 56TT
DEPTH: 1m

CORE: SIZE: 46TT
DEPTH: 21.0m

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 21.0m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed at 10.0m

WATER: nil

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/3

Survey method: Single shot camera
Final depth: 21.0m
Casing depth: 1.0m

Depth surveyed to: 10.0m
Date surveyed: 10/2/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
0	0.50		-44.5	-44.5			
10	360	350	45.45	-44.5	7.0	7.05	1.24
21.0	360	350	45°45'	-44.5	14.68	14.81	2.61
EOH	21.0m						

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 060/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.8	2.8	2.8	100
2.8 - 3.90	1.10	1.10	100
3.90 - 4.56	0.66	0.66	100
4.56 - 5.75	1.19	1.19	100
5.75 - 6.16	0.14	0.14	100
6.16 - 7.78	1.62	1.32	81
7.78 - 9.63	1.85	1.85	100
9.63 - 11.40	1.77	1.77	100
11.40 - 14.0	2.60	2.60	100
14.0 - 15.4	1.4	1.4	100
15.4 - 16.12	0.72	0.72	100
16.12 - 18.0	1.88	1.88	100
18.0 - 21.0	3.0	3.0	100
EOH 21.0m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 060/3

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9462	0	1	1.0	1.0	<0.01	<0.01		
63	1	2	"	"	<0.01	<0.01		
64	2	3	"	"	<0.01	<0.01		
65	3	4	"	"	<0.01	<0.01		
66	4	5	"	"	<0.01	<0.01		
67	5	6	"	"	<0.01	<0.01		
68	6	7	"	"	0.18	<0.01		
69	7	8	"	"	0.03	<0.01		
70	8	9	"	"	0.28	<0.01		
71	9	10	"	"	0.09	<0.01		
72	10	11	"	"	0.46	0.01		
73	11	12	"	"	0.22	0.01		
74	12	13	"	"	1.79	0.03		
75	13	14	"	"	0.44	0.01		
76	14	15	"	"	0.01	0.01		
77	15	16	"	"	<0.01	0.01		
78	16	17	"	"	<0.01	0.01		
79	17	18	"	"	<0.01	0.01		
80	18	19	"	"	<0.01	0.01		
81	19	20	"	"	0.04	0.01		
82	20	21	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 060/3

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 - 7.25	Blens	6		Clay/carb/chl	48°: 0.09m 46-50: 1.2m	100	77	
7.25 - 7.78	SWAN FAULT	ZONE		Clay/breccia/carb		81		
7.78 - 16.12	Banded Gh	5		Chl/clay/carb	56: 12.3m 55: 13.9m		79	
16.12 - 21.0	Bh/ph	6-7		Chl/sulph/carb	55: 16.15m 83: 18.2m 80: 18.8m	100	73	
EOH 21.0m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/3

0.0 - 7.25 B-LENS

B-lens consisting of the following subdivisions.

0.0 - 6.0 MARBLE

Grey coloured marble with very little scheelite present. Nunerous altered clay fractures are typical.

Bedding 48° to LCA at 0.90m
Bedding 46.50 1.2m

6.0 - 7.25 PYROXENE SKARN

Pyroxene rich skarn like rock with minor scheelite present.

7.25 - 7.78 SWAN FAULT ZONE

Broken fractured and carbonate rich fault zone with some 30cm fo core loss. Some of the core (Biotite Hornfels?) appears schistose in texture.

7.78 - 16.12 BANDED LOWER C-LENS (?)

Not typical banded lower C-lens skarn. The unit contains abundant pyroxene hornfels interbedded with a quartz-carbonate rock (similar to that in D 060/2 which forms the host for all the coarse - fine scheelite mineralisation).

The presence of scheelite is very minor and is unlikely to go ore grade (0.3% WO_3). The best intersection occurs from 12.25 - 12.35m (bedded).

The top of the unit adjacent to the Swan Fault is pyroxene and grossular rich.

Broken and fractured core occurs around 14.5m.

Bedding 56° to LCA at 12.3m
55 13.9

16.12 - 21.0 BIOTITE HORNFELS/PYROXENE HORNFELS

Interbedded biotite hornfels/pyroxene hornfels with minor pyroxene and grossular from 18.7 - 20.0m. The unit is well bedded and rare scheelite is present. (18.7 - 20.0m).

Bedding 55° to LCA at 16.15m
83 18.2
80 18.8

EOH 21.0m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 060/3

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9468	0.18	<0.01	11856	0.28	<0.01	11857	0.32		11858	0.22		
9473	0.22	<0.01	11859	0.21	<0.01	11860	0.20		11861	0.17		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/2

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Access Drive

PURPOSE OF HOLE: To Define Pit-Dag Orebody

PROPOSED CO-ORDS: 220060 E 564000 N

INCLINATION: 0^{o} (horizontal)

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

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 0^{o} 02' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220058.4 E 564002.7 N

R.L. OF COLLAR: -169.3

INCLINATION OF HOLE: 0^{o} 01'

PICKED UP BY: W. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: B lens 3-9m, 6m @ 0.38% WO_3
Banded gh 9-18m, 9m @ 2.26% WO_3
Breakthrough in Decline 564020.601
220058.557
-169.3

DRILLING

DATE COMMENCED: 2/2/79 DATE TERMINATED: 5/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 18m

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 18m

REASON FOR TERMINATION: Broke into Decline

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot to

WATER: Nil

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/2

Surveyed method: Single shot
Final depth: 18.00m
Casing depth: Nil

Depth surveyed to: 14/00m
Date surveyed: 5/2/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
14m	2°	352°	90	0°	0	13.80	1.95
18m	2°	352°	90	0°	0	17.82	2.51

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 060/2

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9334	0	1	1.0	1.0	0.06	<0.01		
35	1	2	"	"	0.26	<0.01		
36	2	3	"	"	0.02	<0.01		
37	3	4	"	"	0.36	<0.01		
38	4	5	"	"	0.40	<0.01		
39	5	6	"	"	0.46	<0.01		
40	6	7	"	"	0.50	<0.01		
41	7	8	"	"	0.22	<0.01		
42	8	9	"	"	0.31	<0.01		
43	9	10	"	"	0.49	<0.01		
44	10	11	"	"	0.63	<0.01		
45	11	12	"	"	1.70	0.03		
46	12	13	"	"	3.12	0.04		
47	13	14	"	"	2.35	0.04		
48	14	15	"	"	2.88	0.11		
49	15	16	"	"	9.1	0.24		
50	16	17	"	"	6.4	0.19		
51	17	18	"	"	1.16	<0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/2

0.0 - 5.70m **B-LENS MARBLE**

Grey coloured B-lens marble with microsing pyroxene hornfels towards the base of the unit. The pressure of grossular garnet also increases towards the base. Minor - fair disseminated scheelite is present.

5.70 - 8.30 **GROSSULAR - PYROXENE ROCKS**

Grossular - pyroxene rich rock which in places appears to resemble pyroxene garnet hornfels. This zone is associated with the Swam Fault below. Fair disseminated scheelite is present.

8.30 - 9.25 **SWAN FAULT ZONE**

Partly broken and fractured fault zone with abundant pyroxene and minor grossular present. The top and base are very brecciated. Only minor scheelite is present.

9.25 - 17.90 **PYROXENE - QUARTZ - CARBONATE - SCHEELITE ROCK**

Unusual rock type consisting of pyroxene - quartz - carbonate - sulphides (pyrite and chalcopyrite) and very high grade scheelite. The scheelite content is very high from 11.4m onwards. The unit grades in perceptibly into banded footwall beds at the base, but definitely does not resemble Lower C-lens for the remainder.

Bedding	38^{o} to LCA	at	13.70m
Bedding	40^{o}		16.2m
Bedding	40^{o}		17.3m

17.90 - 18.00 **BIOTITE HORNFELS/PYROXENE HORNFELS**

Fine grained biotite hornfels/pyroxene hornfels with bedding at approx. 40^{o} to LCA. No scheelite is present.

EOH 18.0m (Hit main decline as planned).

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 060/2

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9335	0.26	<0.01	11835	0.33		11836	0.32		11837	0.25		
9344	0.63	<0.01	11838	0.70		11839	0.79		11840	0.59		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 060/1

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Access drive

PURPOSE OF HOLE: To Define Pit-Dag Orebody

CO-ORDS: 220060 E 564000 N

INCLINATION: -90° (ventical)

BEARING: - °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 154° 45° °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220058.5 E 564000.6 N

R.L. OF COLLAR -170.8

INCLINATION OF HOLE -88.51

PICKED UP BY: B. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: No significant mineralisation

DRILLING

DATE COMMENCED: 31/1/79 DATE TERMINATED: 6/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: 56TT
DEPTH: 1m

CORE: SIZE: 46TT
DEPTH: 18.35m

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 18.35

REASON FOR TERMINATION: Bad Ground in Swan Fault zone

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed to 18.35m

WATER: Nil

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 060/1

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9455	0	1	1.0	1.0	0.09	0.01		
56	1	2	"	"	0.14	<0.01		
57	2	3	"	"	0.09	<0.01		
58	3	4	"	"	0.17	<0.01		
59	4	5	"	"	0.12	<0.01		
60	5	6	"	"	0.07	0.01		
61	6	7	"	"	0.02	<0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 060/1

Survey method: Singleshot camera
Final depth: 18.35m
Casing depth: 1.0m

Depth surveyed to: 10.0m
Date surveyed: 10/2/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		S	E
0	154.75	144.75		-88.9	0.	0.	0.
10	141	131	1^{o}	-89	10.0	0.12	0.14
18.35	141	131	1^{o}	-89	18.35	0.22	0.25

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 060/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.12	3.12	3.12	100
3.12 - 5.16	2.04	2.04	100
5.16 - 7.50	2.34	2.34	100
7.50 - 9.59	2.09	2.09	100
9.59 - 9.83	0.24	0.24	100
9.83 - 10.19	0.36	0.36	100
10.19 - 11.33	1.14	1.14	100
11.33 - 13.15	1.82	1.82	100
13.15 - 15.83	2.68	2.0	75
15.83 - 17.21	1.48	2.0	135
17.21 - 17.71	0.50	0.5	100
17.71 - 18.35	0.64	0.64	100
EOH 18.35m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 060/1

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 5.16	B-lens	8-10		Chl/clay/carb sulph		100	53	
5.16 - 9.5	Bh	5-13		Chl/clay/sulph		100	59	
9.5 - 16.5	Bh	12		Chl/clay/sulph		95	23	
16.5 - 18.35	SWAN	FAULT	ZONE					
EOH 18.35m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 060/1

0.0 - (?)5.20m **B-LENS**

Typical B-lens consisting of dominantly grey coloured marbles with abundant disturbed (?) greenish pyroxene hornfels zones. White carbonate - clay weathering along joints and fractures is common.

Very minor scheelite mineralisation is present.

(?) 5.20 - 9.50 **BIOTITE HORNFELS**

Fine to medium grained grey to brown coloured biotite hornfels with rare pyroxene alternation zones and patches. Towards the base of the unit, the unit appears to become more 'schistose' like.

Rare scheelite mineralisation is present.

9.50 - 12.30 **GROSSULARITE-PYROXENE - QUARTZ- CARBONATE - SULPHIDE**

Intermixed and unusual rock type of the above constituents with no visible scheelite present. The core around 10.19m is rubbly broken fractured and possibly faulted.

12.30 - 16.50 **BIOTITE HORNFELS**

Fine grained biotite hornfels with numerous actinolite alteration zones and patches. No scheelite is present. Rubbly core occurs around 15.83m.

16.50 - 18.35 **SWAN FAULT ZONE**

Broken and fractured fault zone with abundant chlorite, slickensides, and quartz carbonate with no visible scheelite.

The top of the unit from 16.5 - 17.21m, is pyroxene and grossular rich and resembles pyroxene garnet hornfels.

EOH 18.35m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 060/1

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9458	0.17	<0.01	11847	0.26	<0.01	11848	0.16		11849	0.13		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 050/4

PLANNING

PROPOSER: G. J. Bujtor DEPTH: 12m

LOCATION: I12 Access Drive

PURPOSE OF HOLE: To Define Pit Dag Orebody

CO-ORDS: 220050 E 564011 N

INCLINATION: 0^{o} (Horizontal)

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

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 2^{o} 00' ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220048.8 E 564013.1 N

R.L. OF COLLAR -168.13

INCLINATION OF HOLE $+1^{o}$ 00'

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

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: 0-9m, 9m @ 1.44% WO_3

DRILLING

DATE COMMENCED: 12/3/79 DATE TERMINATED: 12/3/79

DRILLER/CONTRACTOR: Add

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 10.70

WEDGE PLACED: Nil DATE:

EXTENSION: Nil

FINAL DEPTH: 10.70

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 050/4

Surveyed method: Single shot
Final depth: 10.70m
Casing depth: -

Depth surveyed to: 4m
Date surveyed: 15/3/79
Surveyed by: R. J. S. P.
Checked by: L. Denby

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
4	2^{o}	352	$98^{o}30'$	-1^{o} 30'	.59	3.92	.55
10 - 70	2^{o}	352	$98^{o}30'$	-1^{o} 30'	1.58	10.48	1.47

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 050/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 5.5	5.5	5.5	100
5.5 - 8.5	3.0	3.0	100
8.5 - 10.7	2.2	2.2	100
EOH 10.7m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 050/4

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 9.35	Gh	9		Chl/clay/carb sulph			67	
9.35 - 10.7	Bh/Ph	10		Chl/sulph/ clay/carb			30	

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 050/4

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9699	0	1	1.0	1.0	4.4	0.14		
9700	1	2	"	"	0.98	<0.01		
01	2	3	"	"	1.13	0.02		
02	3	4	"	"	1.22	0.03		
03	4	5	"	"	2.98	0.06		
04	5	6	"	"	0.50	0.01		
05	6	7	"	"	0.88	0.01		
06	7	8	"	"	0.69	0.01		
07	8	9	"	"	0.62	0.02		
08	9	10	"	"	0.21	0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 050/4

0.0 - 9.35m BANDED SKARN - LOWER C-LENS

Coarse grained banded andradite skarn with numerous interbeds of pyroxene hornfels. Fine to coarse scheelite is present throughout.

Badly broken core (probably fault zone with pyroxene enrichment) occurs around 3.0m.

Disturbed bedding with pyroxene enrichment also occurs from 9.0 - 9.35m

Bedding is well developed.

Bedding	27^{o}	to	LCA	at 2.75m
	30^{o}			4.9m
	15^{o}			5.70
	29^{o}			6.75
	27^{o}			8.1

9.35 - 10.7 BIOTITE HORNFELS/PYROXENE HORNFELS

Well bedded Biotite hornfels/pyroxene hornfels with broken and rubbly core around 9.45m (possible fault zone).

Bedding 53^{o} to LCA at 10.6m

Hole intersected main decline.

EOH 10.7m

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 050/3

PLANNING

PROPOSER: G. J. Bujtor DEPTH: 21.30m

LOCATION: I12 Access Drive

PURPOSE OF HOLE: To Define Pit dag Orebody

PROPOSED CO-ORDS: 220050 E 564011 N

INCLINATION: -90^{o}

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

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

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

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: E N

R.L. OF COLLAR:

INCLINATION OF HOLE:

PICKED UP BY: DATE:

SUMMARY

LOGGED BY:

RESULTS: 0 - 13m, 13m @ 0.95% WO_3

Hole not picked-up in time and collar lost through developement.

DRILLING

DATE COMMENCED: 14/3/79 DATE TERMINATED: 15/3/79

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 17.30

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 17.30m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 050/3

Surveyed method: Single shot
Final depth: 17.30m
Casing depth:

Depth surveyed to: 11.00m
Date surveyed: 19/3/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	E
11m	44°	34°	1° 15'	-88° 45'	11.00	.20	.13
17.30	44°	34°	1° 15'	-88° 45'	17.30	.31	.21

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 050/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.50	2.5	2.5	100
2.5 - 3.2	0.7	0.7	100
3.2 - 4.7	1.5	1.5	100
4.70 - 6.05	1.35	1.35	100
6.05 - 9.05	3.0	3.0	100
9.05 - 11.80	2.75	2.75	100
11.80 - 14.40	2.60	2.60	100
14.40 - 17.30	2.9	2.9	100
EOH 17.30m			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

D.D.H. No. D 050/3

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 - 12.5m	Gh	6-7		Chl/clay/carb/sulph			72	
12.5 - 17.30	Bh/ph	7-15		Chl/clay/carb/sulph			57	
EOH 17.30m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 050/3

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 9725	0	1	1.0	1.0	0.47	0.01		
26	1	2	"	"	1.45	0.02		
27	2	3	"	"	2.10	0.03		
28	3	4	"	"	0.98	0.03		
29	4	5	"	"	1.05	0.02		
30	5	6	"	"	0.74	0.01		13m @ 0.95% WO_3
31	6	7	"	"	1.02	0.01		
32	7	8	"	"	0.25	<0.01		
33	8	9	"	"	1.14	0.03		
34	9	10	"	"	0.37	0.01		
35	10	11	"	"	0.96	0.01		
36	11	12	"	"	1.20	0.01		
37	12	13	"	"	0.56	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 050/3

0.0 - 12.50m BANDED SKARN - LOWER C-LENS

Coarse grained and bedded andradite skarn with numerous interbeds of green pyroxene hornfels. Fine disseminated scheelite is present throughout (Ore-grade).

The top 1m of core is broken (due to blasting). Possible minor fault occurs at 8.20m (clay and shearing).

Bedding 48^{o} to LCA at 1.50m
Bedding 48^{o} 4.9m
Bedding 35^{o} 10.1m

12.50 - 17.30 BIOTITE HORNFELS/PYROXENE HORNFELS

Fine grained well bedded biotite hornfels/pyroxene hornfels with no scheelite present. Minor pyroxene-grossular rich rock occurs from 15.0 - 15.30m. A badly broken zone of core occurs from 12.6 - 13.0 (minor carbonate veining present).

Bedding 58^{o} to LCA at 13.7m

EOH 17.03m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 050/3

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9732	0.25	<0.01	11874	0.17	<0.01	11875	0.27		11876	0.30		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 050/2

PLANNING

PROPOSER: G. J. Bujtor DEPTH: 17.30

LOCATION: I12 Access Drive

PURPOSE OF HOLE: To Define Pit Dag Orebody

CO-ORDS: 220050 E 564011 N

INCLINATION: -43^{o}

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

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

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

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

RESULTS: 0-7m 7m @ 1.34% WO_3
9-11m 2m @ 0.90% WO_3

Hole not picked up in time and collar lost through development.

DRILLING

DATE COMMENCED: 12/3/79 DATE TERMINATED: 12/3/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: 46TT
DEPTH: 21.30

WEDGE PLACED: Nil DATE:

EXTENSION: Nil

FINAL DEPTH: 21.30.

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Single shot

WATER:

COMMENTS ON DRILLING CONDITIONS: Good

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 050/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.5m	3.5	2.5	71
3.5 - 6.3	2.8	2.8	100
6.3 - 8.8	2.5	2.5	100
8.8 - 10.1	1.3	1.3	100
10.1 - 12.8	2.7	2.7	100
12.8 - 14.0	1.2	1.2	100
14.0 - 15.7	1.7	1.7	100
15.7 - 16.2	0.5	0.5	100
16.2 - 19.0	2.8	2.8	100
19.0 - 21.3	2.3	2.3	100
EOH 21.3			

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 050/2

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 8.6	Gh	5-8		Chl/clay/carb/ sulph			74	
8.6 - 15.70	Bfb	10		Chl/clay/sulph carb.			54	
15.70 - 21.30	Bh/Ph	5-6		Chl/sulph/carb clay			73	
EOH 21.30m								

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 050/2

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9709	0	1	1.0	1.0	0.60	0.01		
10	1	2	"	"	0.76	0.01		
11	2	3	"	"	1.41	0.03		
12	3	4	"	"	1.20	0.02		
13	4	5	"	"	1.12	0.01		
14	5	6	"	"	0.28	<0.01		
15	6	7	"	"	4.3	0.07		
16	7	8	"	"	0.20	<0.01		
17	8	9	"	"	0.08	0.01		
18	9	10	"	"	1.23	0.03		
19	10	11	"	"	0.56	0.01		
20	11	12	"	"	0.03	0.01		
21	12	13	"	"	0.06	0.01		
22	13	14	"	"	0.19	0.04		
23	14	15	"	"	0.03	0.01		
24	15	16	"	"	0.05	0.03		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 050/2

0.0 - 8.60m BANDED SKARN - LOWER C LENS

Coarse grained well bedded andradite garnet skarn with fine to coarse disseminate scheelite throughout. The unit appears to grade into a pyroxene - grossular skarn (bedded) towards the base.

Bedding	54°	to	LCA	at	3.0m
	75°				6.3m
	51°				8.0m

The top of the hole is fractured and broken no doubt due to blasting of the drive.

8.60 - 15.80 BANDED FOOTWALL BEDS - BIOTITE PYROXENE HORNFELS

Well bedded sequence of Banded footwall beds and biotite hornfels/pyroxene hornfels with andradite garnet common in the top of the unit and grossular in the bottom half. Fine disseminated scheelite is associated with the andradite. Broken and fractured core occurs from/around 8.7m (minor rubble), around 10.1m, around 11.85m.

Bedding	60°	to	LCA	at	9.0m
	48°				13.4m

15.80 - 17.00 ?GRANITE?

Medium grained, whitish siliceous intrusive carrying abundant sulphides. It is not a granite nor an aplite.

Badly broken, rubbly and clayey core occurs from 16.0 - 16.2m (probably fault).

17.00 - 21.30 BIOTITE HORNFELS/PYROXENE HORNFELS

Well bedded biotite hornfels/pyroxene hornfels numerous interbeds of grossular garnet and pyroxene reaction zones. Only rare scheelite specks are present.

Bedding	65°	to	LCA	at	17.5m
	74°				19.6m

EOH 21.30m

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 050/2

Survey method: Singleshot
Final depth: 21.30m
Casing depth:

Depth surveyed to: 6.0m
Date surveyed: 21/3/79
Surveyed by: R. J. S. P
Checked by: L. Denby

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
6.00	1°	351°	47°	-43°	4.09	4.33	.69
21.00	1°	351°	47°	-43°	14.52	15.38	2.44

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 050/2

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9709	0.60	0.01	11868	0.59	<0.01	11869	0.62		11870	0.53		
9722	0.19	0.04	11871	0.13	<0.01	11872	0.15		11873	0.09		

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO.D050/1

PLANNING

Proposer: M.J. Danielson — **Depth:** 25m

Location: C10 Stope - Southern end.

Purpose of hole: Test the position and thicknesses of C lens in C pit West.

Co-ordinates: 220 045 E 564 017 N
Inclination: -8 Magnetic:
Bearing 250 Grid Target Depth:
Target: E N
Approved by: M.C. Rogers Date: 1/11/76

SURVEY

Survey Co-ords: E N
Survey bearing: 250 20' Grid Magnetic:
Surveyed in by: Date:
Actual Co-ords: 220 044.86 E 564 015.49 N
R.L. of Collar: -155.13 Inclination of Hole: -9 00'
Picked up by: M.G.M. Date: 5.11.76

SUMMARY

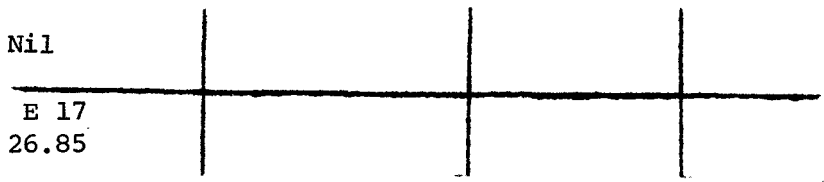
Logged by: G.L. Buckland
Results: C lens
3 - 20m, 17m @ 0.55% WO_3

DRILLING

Driller/Contractor: M5

Date commenced: 3/11/76 Date terminated: 5/11/76

Casing: Size: Nil
Depth:
Core: Size: E 17
Depth: 26.85



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

Extension: Nil
Reason for termination: Hole passed into unmineralised footwall hornfels.
Condition of hole on completion: Final depth: 26.85
Casing: Nil
Cemented: No
Bore hole survey: Acid tube to 26m
Water: Nil

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. DOLPHIN 050/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.60	2.60	2.56	98
5.05	2.45	2.46	100
7.10	2.05	2.10	102
9.15	2.05	1.95	95
11.85	2.70	2.72	101
14.90	3.05	3.05	100
17.20	2.30	2.30	100
20.80	3.60	3.47	96
23.80	3.00	2.92	97
26.85	3.05	3.05	100

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. DOLPHIN 050/1

Survey method: Acid tube
Final depth : 26.85m
Casing depth :

Depth surveyed to: 26.85m
Date surveyed: 6/11/76
Surveyed by : L. Limbourne
Checked by : G. Buckland

[illegible]th	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
26.85			13°	-10°			

REMARKS:

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. DOLPHIN 050/1

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5227	3	4	1.0	1.0	5.4			
8	4	5	"	"	0.01		Coarse scheelite take as 1%	
9	5	6	"	"	2.61			
30	6	7	"	"	0.14			
1	7	8	"	"	0.24			
2	8	9	"	"	0.10			
3	9	10	"	"	1.31			
4	10	11	"	"	1.59			
5	11	12	"	"	0.24			
6	12	13	"	"	2.04		3 -20m, 17m @ 0.55% WO_3	
7	13	14	"	"	0.65			
8	14	15	"	"	0.22			
9	15	16	"	"	0.12			
40	16	17	"	"	0.09			
1	17	18	"	"	< 0.01			
2	18	19	"	"	0.46			
3	19	20	"	"	0.22			
D5244	20	21	"	"	0.01			

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. 050/1

LAB.	K.I.S.		LAB. K.I.S.			LAB. AMDEL			LAB. ACSL			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
D5235	0.24		D5464	0.31	0.02	D5465	0.36		D5466	0.30		
D5237	0.65		5467	0.57	0.04	5468	0.635		5469	0.74		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. DOLPHIN 050/1

Core Size: E17
(24mms. dia.)

0 - 0.77 DISTURBED HORNFELS

A fine grained pyroxene biotite hornfels containing very weak scheelite mineralisation. The last 37cm. of this unit is disturbed, having a mottled green (ph) and white (quartz and grossularite) coloured appearance, possibly representing disturbed pgh adjacent to the acid dyke.

This hole was collared adjacent to the 'P' Fault.

0.77 - 3.07 ACID DYKE

A grey coloured igneous textured dyke rock containing minute flecks of mafic (?) material set in a quartz rich groundmass. The dyke margins are dark grey/black in colour.

The contact at 3.07m is at 23° to LAOC.

3.07 - 9.25 PYROXENE GARNET HORNFELS

A rock containing occasional white calcite or acids surrounded by a mottled pyroxene rich groundmass with weak disseminated scheelite mineralisation to 8.40. From 8.40 to 9.25 the core is enriched in pyroxene and develops a uniform fine grained texture with only isolated crystals of scheelite.

Assays from 3-4 and 5-6m will reflect the presence of coarse scheelite at 3.35-3.41 and 5.12-5.18m respectively.

9.25 - 13.47 GARNET HORNFELS

A massive fine grained andradite garnet hornfels containing medium grade finely disseminated scheelite mineralisation except: 10.95 - 11.14 and
11.80 - 12.20 Acid dykes, and
11.14 - 11.80 an interval of
core enriched in pyroxene and having only isolated specks of scheelite.

The following are contact angles between dykes and gh.

At	10.95m	50° LAOC
	11.14m	60° "
	11.80m	26° "
	12.20m	27° "

The lower contact of this unit is placed where the finely disseminated scheelite mineralisation ceases.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 050/1

13.47 - 22.78 PYROXENE GROSSULAR HORNFELS

An interval of dominantly green ph and pinkish-red grossular hornfels with minor grey ah and brown bh having weak disseminated scheelite to 19.02m and there after being almost barren.
Original bedding is disturbed.
Fault: 17.33 - 17.67m a brecciated interval of ph/bh with abundant montmorillonite on fracture surfaces.

22.78 - 26.85 BIOTITE PYROXENE HORNFELS

A barren bph showing a disturbed texture.
No bedding.

26.85m E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. D 040/13

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Pit Dag Access

PURPOSE OF HOLE: To Define Pit Dag Orebody

CO-ORDS: 220 040 E 564017 N

INCLINATION: -90^{o}

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

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

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

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220040.9 E 564016.7 N

R.L. OF COLLAR -168.4

INCLINATION OF HOLE -90^{o}

PICKED UP BY: B. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Banded Skarn/BFB 1-10m, 9m @ 0.58% WO_3

DRILLING

DATE COMMENCED: 15/2/79 DATE TERMINATED: 16/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: 56TT
DEPTH: 1.0m

CORE: SIZE: 46TT
DEPTH: 20.0m

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 20.0m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed at 20.0m

WATER: Nil

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 040/13

Survey method: Single shot camera
Final depth: 20.0m
Casing depth: 1.0m

Depth surveyed to: 20.0m
Date surveyed: 17/2/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	E
0	-	-		-90	0	0	0
10	054	044	2^{o} 30'	-87.5^{o}			
20	054	044	2^{o} 30'	-87.5^{o}	19.98	0.63	0.60

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. D 040/13

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.40	1.4	1.4	100 broken
1.40 - 3.34	1.94	1.94	100
3.39 - 4.90	1.56	1.56	100
4.90 - 6.75	1.85	1.85	100
6.75 - 7.32	0.57	0.57	100
7.32 - 9.44	2.08	2.08	100
9.44 - 10.48	1.04	1.04	100
10.48 - 12.40	1.92	1.92	100
12.40 - 13.93	1.53	1.53	100
13.93 - 15.70	1.77	1.77	100
15.70 - 17.50	1.80	1.80	100
17.50 - 18.80	1.3	1.3	100 Broken
18.80 - 20.0	1.2	1.2	100
EOH 20.0m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. D 040/13

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 9483	0	1	1.0	1.0	0.24	0.01		
84	1	2	"	"	0.64	<0.01		
85	2	3	"	"	0.45	<0.01		
86	3	4	"	"	0.43	0.01		
87	4	5	"	"	0.90	0.01		
88	5	6	"	"	0.36	<0.01		
89	6	7	"	"	0.49	<0.01		
90	7	8	"	"	<0.01	<0.01		
91	8	9	"	"	1.42	0.02		
92	9	10	"	"	0.56	0.01		
93	10	11	"	"	0.28	0.01		
94	11	12	"	"	0.09	0.01		
95	12	13	"	"	1.21	0.02		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY STRUCTURAL DATA

DDH No. D 040/13

DEPTH INTERVAL (METRES)	ROCK TYPE	FRAC-TURES /m	JOINT ANGLE (WRT LAOC)	JOINT FILLING	BEDDING ANGLE (W.R.T. L.A.O.C.)	% CORE RECO-VERY	R.Q.D.	REMARKS (WEATHERING)
0.0 - 12.8	Banded Gh & BFB(min)	8.10		Clay/chl/carb. Sulph	58°: 2.45m 55°: 3.4m 56°: 5.0m 66°:11.5m	100	50	
12.8 - 20.0	Bh/Ph	8.10		Chl/sulph/clay	66°:12.9m 77°:16.8m	100	72	

FURTHER DATA & REMARKS

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

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. D 040/13

0.0 - 6.65 BANDED SKARN - LOWER C-LENS

Bedded, coarse grained andradite skarn with fair to good fine disseminated scheelite present. Numerous interbeds of pyroxene hornfels and actinolite hornfels are also present.

Bedding	58^{o}	to	LCA	at 2.45m
Bedding	55^{o}			3.4m
Bedding	56^{o}			5.0m

6.65 - 12.80 BANDED FOOTWALL BEDS - MINERALISED

Patchely mineralised Banded Footwall Beds with some barren marble beds and interbedded Biotite Hornfels/Pyroxene Hornfels towards the base. Andradite skarn interbeds are present as well as grossular garnet and pyroxene reaction zones.

Bedding	75^{o}	to	LCA	at 9.9m
Bedding	66^{o}			11.5m

12.80 - 20.0 BIOTITE HORNFELS/PYROXENE HORNFELS

Interbedded Biotite Hornfels/Pyroxene Hornfels with no andradite skarn interbeds.

A major fault occurs from 18.15 - 18.80m and contains abundant pyroxene and grossular garnet associated with it, from 18.8 - 20.0m. Rare scheelite is present.

Bedding	66^{o}	to	LCA	at 12.9m
Bedding	77^{o}			16.8m

EOH 20.0m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 040/13

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9483	0.24	0.01	11850	0.16	<0.01	11851	0.21		11852	0.28		
9493	0.28	0.01	11853	0.27	<0.01	11854	0.37		11855	0.28		

GEOPEKO - KING ISLAND

LOG OF D.D.H. No. 040/12

PLANNING

PROPOSER: G. J. Bujtor DEPTH:

LOCATION: I12 Pit Dag Access

PURPOSE OF HOLE: To Define Pit Day Orebady

CO-ORDS: 220 040 E 564017 N

INCLINATION: -42°

BEARING: 180° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 181° 06' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 220 041.1 E 564015.4 N

R.L. OF COLLAR: -168.3

INCLINATION OF HOLE: -41° 44

PICKED UP BY: B. Davies DATE: 8/3/79

SUMMARY

LOGGED BY: G. J. Bujtor

RESULTS: Lower C-lens 0-2 m, 2m @ 0.59% WO_3
Lower C-lens 6-23m, 17m @ 1.88% WO_3

DRILLING

DATE COMMENCED: 12/2/79 DATE TERMINATED: 14/2/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE: 46TT
DEPTH: 1.0 m

CORE: SIZE: 46TT
DEPTH: 34.58

WEDGE PLACED: DEPTH:

EXTENSION:

FINAL DEPTH: 34.58 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Surveyed at 3.0 m Only. Hole Collapsed

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 040/12

Survey method: Single shot
Final depth: 34.58 m
Casing depth: 1m

Depth surveyed to: 3.0 m
Date surveyed 2/3/79
Surveyed by: L. Denby
Checked by: G. J. Bujtor

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected			
3 m	182°	172° 58'	48° 30'	- 41.5			
34 (assumed)	182°	172° 58'	48° 30'	- 41.5			
EOH 34.58 m							

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 040/12

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.76	2.76	2.76	100
2.76 - 4.06	1.3	1.3	100
4.06 - 6.64	2.58	2.58	100
6.64 - 9.10	2.36	2.36	100
9.10 - 10.63	1.53	1.53	100
10.63 - 12.82	2.19	2.19	100
12.82 - 14.30	1.48	1.48	100
14.30 - 16.74	2.34	2.34	100
16.74 - 17.93	1.19	1.19	100
17.93 - 21.0	3.07	3.07	100
21.0 - 23.0	2.0	2.0	100
23.0 - 25.0	2.0	2.0	100 broken
25.0 - 26.33	1.33	1.33	100
26.33 - 29.35	3.02	3.02	100
29.35 - 31.64	2.29	2.29	100
31.64 - 33.81	2.17	2.17	100
33.81 - 34.08	0.27	0.27	100
34.08 - 34.58	0.5	0.5	100
EOH 34.58 m			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

DDH No. D 040/12

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)
0.0 - 12.82	Banded Gh	6-10		Chl, clay, carb, sulph	34^{o}: 2.0 m 35^{o}: 7.9 m 47^{o}: 11.0 m	100	58	
12.82 - 24.0	Banded gh	6-7		Chl,clay, carb, Sulph, Mo	45^{o}: 13.3	100	82	
24.0 - 25.0	SWAN FAULT ZONE							
25.0 - 34.58	Bh/Ph	5-6		Chl, clay, sulph, carb.		100	83	
EOH 34.58 m								

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 040/12

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	TO	Length	Length Recovered	WO_3	Mo		
D 9383	0	1	1.0	1.0	0.84	0.02		
84	1	2	"	"	0.33	<0.01		
85	2	3	"	"	0.12	<0.01		
86	3	4	"	"	<0.01	<0.01		
87	4	5	"	"	<0.01	<0.01		
88	5	6	"	"	<0.01	<0.01		
89	6	7	"	"	0.30	<0.01		
90	7	8	"	"	0.43	<0.01		
91	8	9	"	"	0.50	<0.01		
92	9	10	"	"	0.55	<0.01		
93	10	11	"	"	0.49	<0.01		
94	11	12	"	"	2.31	0.03		
95	12	13	"	"	2.75	0.03		
96	13	14	"	"	4.70	0.08		
97	14	15	"	"	2.07	0.04		
98	15	16	"	"	0.78	0.01		
99	16	17	"	"	0.65	<0.01		
9400	17	18	"	"	1.78	0.02		
23	18	19	"	"	2.90	0.15		
24	19	20	"	"	2.70	0.06		
25	20	21	"	"	3.30	0.05		
26	21	22	"	"	3.70	0.05		
27	22	23	"	"	2.05	0.02		
28	23	24	"	"	0.02	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type :

S.G. :

Determined by:

GEOPEKO - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 040/12

0.0 - 24.00 LOWER C-LENS: BANDED SKARN

Typical well bedded lower C-lens banded skarn with fair to good scheelite mineralisation present. The scheelite content increases from 12 m onwards.

So	34°	to	LCA	at 2.0 m
So	30			6.6
So	35			7.8
So	47			11.0
So	45			13.3
So	18(?)			15.5

Free molybdenum and sulphides occur around 18.4m

The base of the unit from 19.5 - 24.0m, is very pyroxene rich and in places crudely resembles Pyroxene garnet hornfels. Some very coarse scheelite is present.

24.00 - 25.00 SWAN FAULT

Carbonate veined, broken, brecciated, fractured and clayey fault zone with no visible scheelite present.

25.00 - 27.70 PYROXENE HORNFELS

Fine to coarse grained dark green pyroxene hornfels with one coarse scheelite vein around 25.65. The unit grades into hornfels below.

27.70 - 34.58 BIOTITE HORNFELS

Grey to dark brown coloured Biotite hornfels with numerous aplite veins (29.65 m, 32.2 - 32.45 m) and no visible scheelite

Part of the Biotite hornfels appars to have a schistose - like texture (sheared?)

EOH 34.58 m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 040/12

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
9384	0.33	<0.01	11841	0.31		11842	0.43		11843	0.36		
9399	0.65	<0.01	11844	0.65	<0.01	11845	0.65		11846	0.58		

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. Dolphin 040/11

PLANNING

Proposer: M.J. Danielson — Depth: 105m

Location: J9 -150m R.L.

Purpose of hole: C lens oreblocking south of Gull Fault

Co-ordinates: 220 040 E 563 950 N

Inclination: -59^{o} Magnetic

Bearing: 180^{o} Grid — Target depth:

Target: E N

Approved by: M.C. Rogers — Date:

SURVEY

Survey Co-ords: - E N

Survey bearing: 177^{o} 50' Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220 040.41 E 563 951.27 N

R.L. of collar: F - 148.7 — Inclination of hole: -57^{o} 40'

Picked up by : R.J.H. — Date: 21/6/77

SUMMARY

Logged by : M. Danielson

Results: No C lens intersection

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 8/6/77 — Date terminated: 22/6/77

Casing: Size : BXTT

Depth : 1m

Core: Size : 46TT

Depth : 113.1

Wedge Runoff:

Wedge placed: Nil — Depth:

Proposed by : — Approved by:

Reason:

Extension: No

Reason for termination: In granite — Final depth: 113.1m

Condition of hole on completion:

Casing : ~~1m BXTT remains~~ Removed

Cemented : No

Bore hole survey: Multishot to 113.0m

Water: Making water below 94.2m

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. Dolphin 040/11

Survey method: Multishot camera
Final depth : 113.1m
Casing depth : 1.0m

Depth surveyed to: 113.0
Date surveyed: 21/6/77
Surveyed by : L. Denby
Checked by : M.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
22	180	170	31.5	-58.5	15.35	11.34	1.99
40	180	170	31.25	-58.75	34.11	20.57	3.62
64	180	170	30.5	-59.5	54.70	32.79	5.89
82	180	170	29.5	-60.5	70.30	41.71	7.52
106	181	171	28.75	-61.25	91.32	53.14	9.43
113	181	171	28.5	-61.5	97.46	56.51	9.97

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. dolphin 040/11

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.8	2.8	2.8	100
4.7	1.9	1.9	100
6.5	1.8	1.8	100
7.7	1.2	1.2	100
9.6	1.9	1.8	95
12.6	3.0	3.0	100
15.6	3.0	3.0	100
18.7	3.1	3.1	100
21.7	3.0	3.0	100
24.5	2.8	2.6	93
27.5	3.0	3.0	100
30.5	3.0	3.0	100
31.0	0.5	0.5	100
34.0	3.0	3.0	100
37.0	3.0	3.0	100
40.0	3.0	3.0	100
43.0	3.0	3.0	100
46.0	3.0	3.0	100
49.0	3.0	3.0	100
52.0	3.0	3.0	100
55.0	3.0	3.0	100
58.0	3.0	3.0	100
60.7	2.7	2.6	96
63.7	3.0	3.0	100
66.7	3.0	2.9	97
69.7	3.0	3.0	100
72.7	3.0	2.9	97
75.7	3.0	3.0	100
78.7	3.0	3.0	100
81.7	3.0	3.0	100
84.7	3.0	3.0	100
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	2.9	97
99.4	2.7	2.4	89
100.7	1.3	0.4	31
102.4	1.7	0.9	53
103.7	1.3	1.3	100
105.6	1.9	1.7	89
107.1	1.5	1.5	100
110.1	3.0	3.0	100
113.1	3.0	3.0	100
EOH			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/11

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 - 37.0	UV	7		clay		99	79	bad ground 10.7 - 12.6
37.0 - 60.7	B Lens	4		clay minor carbonate		100	81	Possible Fault 49.8 - 52.5m reconsolidated breccia zone. 50.9m. Montmorillonite on fracture surfaces.
60.7 - 75.7	B Lens	3		carbonate clay below 70m.		99	89	Possible Fault 74 - 76m Montmorillonite on fracture surfaces.
75.7 - 93.7	bh	4		clay		100	80	Possible Fault carbonate recemented breccia zone 86.8 - 87.1
93.7 - 103.7	bh	Var.		clay		79	29	Unit shows evidence of washing
94.2	Water inflow							

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. DOLPHIN 040/11

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 5842	42	43	1.0	1.0	<0.01	<0.01		
3	43	44	"	"	0.43	0.02		
4	44	45	"	"	0.22	0.01		
5	45	46	"	"	0.38	0.01		
6	46	47	"	"	0.04	<0.01		
7	47	48	"	"	0.74	0.02		
8	48	49	"	"	0.23	0.01		
9	49	50	"	"	0.21	<0.01		
50	50	51	"	"	1.05	0.03		
1	51	52	"	"	0.26	0.01		
2	52	53	"	"	0.35	0.01		
3	53	54	"	"	<0.01	<0.01		
5857	66	67	1.0	1.0	0.43	0.01		
8	67	68	"	"	<0.01	<0.01		
9	68	69	"	"	<0.01	<0.01		
60	69	70	"	"	0.25	0.01		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 040/11

o.o - 35.8 UPPER METAVOLCANICS

Pale grey green, spotted and fragmental texture. Core quality is generally moderate to good with only bad ground 10.7 - 12.6m.

This unit is variable in appearance and its lower contact with biotite hornfels appears gradational between 33.5 and 37.5m.

35.8 - 42.1 BIOTITE HORNFELS

A pale grey fine grained barren hornfels. Frequent but thin (less than 5cm) aplite veining throughout.

42.1 - 76.0 B LENS

Garnet Pyroxene Hornfels 42.1 - 45.3

Carbonate rich grossular garnet and pyroxene skarn. Minor andradite garnet and finely disseminated scheelite.

Marble 45.3 - 48.5

Mostly a barren grey marble becoming more pyroxene rich towards base with very minor disseminated scheelite below 48m.

Garent Pyroxene Hornfels 48.5 - 52.7

Strongly fragmental texture with angular rafts of carbonate up to 3cm dia. in a pyroxene grossular matrix. Finely disseminated scheelite throughout. Montmorillonite on fracture surface at 50.9m. Possible fault zone 49.8 - 52.5m.

Tuffite 52.7 - 62.2

Massive grey unit with small fragments up to 2mm dia set in finer grained matrix. Weak mineralisation in gph between

57.7 - 57.9
58.2 - 58.3

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 040/11

Marble 62.2 - 66.4

Barren grey marble.

Garnet Pyroxene Hornfels 66.4 - 70.6

Minor disseminated scheelite throughout.

Tuffite 70.6 - 72.7

Podded fragmental texture. Black dark grey fragments (≈2m dia) set in a green matrix.

Biotite Pyroxene Hornfels 72.7 - 76.0

Barren green brown interbedded hornfels. Minor interbedded pyrrhotite. Some pyrite on fracture surfaces.
This unit is sheared with montmorillonite on fracture surfaces between 74 - 76m.

76.0 - 109.4 BIOTITE HORNFELS

Barren grey fine grained hornfels.

86.8 - 87.1 is a carbonate recemented breccia zone and maybe a fault.

Water inflow at 94.2m. 94.1 - 94.3 is a leached carbonate breccia.

Between 96.7 - 103.7 there is 21% core loss and much of this zone is leached and claying probably due to abundant water.

109.4 - 113.1 GRANITE
EOH

Contact does not appear as poor ground conditions.

Granite is medium grained and strongly porphyritic. No evidence of solution cavities.

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. D 040/11

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.C.S.L.		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
5844	0.43	0.02	12069	0.19		12070	0.29		12071	0.22		
5857	0.43	0.01	12072	0.62		12073	0.58		12074	0.47		

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D 040/10

PLANNING

Proposer: M. Danielson — Depth: 100m

Location: J9 -150m R.L.

Purpose of hole: C lens oreblocking South of Gull Fault.

Co-ordinates:	220040	E 563950	N
Inclination:	-80		Magnetic
Bearing:	180	Grid	Target depth:
Target:		E	N
Approved by:	M.C. Rogers		Date: 1/6/77

SURVEY

Survey Co-ords:	-	E	N
Survey bearing:	175° 20'	Grid	Magnetic
Surveyed in by:	-		Date:
Actual Co-ords:	220040.41	E 563951.75	N
R.L. of collar:	F - 148.6		Inclination of hole: -79° 40'
Picked up by :	R.J.H.		Date: 2/6/77

SUMMARY

Logged by M; Danielson

Results: C lens 75 - 79m, 4m @ 0.78% WO_3

DRILLING

Driller/Contractor: A.D.D.

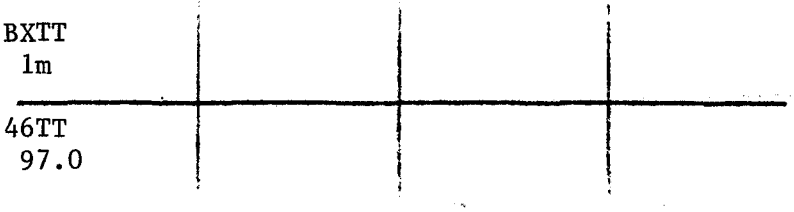
Date commenced: 28/5/77 — Date terminated: 8/6/77

Casing: Size : BXTT

Depth : 1m

Core: Size : 46TT

Depth : 97.0



Wedge Runoff:

Wedge placed: Nil — Depth:

Proposed by : — Approved by:

Reason:

Extension: Nil

Reason for termination: Hole passed below mineral horizon. — Final depth: 97.0m

Condition of hole on completion:

Casing : No

Cemented : Yes

Bore hole survey: Multishot to 97.0m

Water: Nil

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 040/10

Survey method: Multishot Camera
Final depth : 97.0m
Casing depth : 1m

Depth surveyed to: 97.0
Date surveyed: 8/6/77
Surveyed by :L. Denby
Checked by :M.J.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
46	173	163 5°E	8.5	-81.5	45.44	6.85	1.77
61	182	172 5°E	8.75	-81.25	60.28	9.07	2.21
82	182	172 5°E	8.25	-81.75	81.07	12.05	2.64
97	187	177 5°E	8.25	-81.75	95.92	14.20	2.87

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 040/10

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.5	3.5	3.4	97
6.5	3.0	3.0	100
9.6	3.1	3.1	100
12.6	3.0	3.0	100
15.6	3.0	3.0	100
18.6	3.0	3.0	100
21.6	3.0	3.0	100
24.8	3.2	3.2	100
27.8	3.0	3.0	100
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
49.2	0.4	0.35	88
52.3	3.1	3.1	100
54.8	2.5	2.5	100
57.8	3.0	3.0	100
58.4	0.6	0.6	100
61.4	3.0	3.0	100
64.4	3.0	3.0	100
67.4	3.0	3.0	100
70.4	3.0	3.0	100
72.0	1.6	1.6	100
73.5	1.5	1.5	100
76.5	3.0	3.0	100
79.5	3.0	3.0	100
82.5	3.0	3.0	100
85.5	3.0	3.0	100
88.5	3.0	2.9	97
91.0	2.5	2.4	96
94.0	3.0	3.0	100
97.0	3.0	3.0	100

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/10

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 - 21.6	UV	8		clay montmorillomite		100	66	
21.6 - 39.8	bh	5		clay	32m: 40°	100	73	
39.8 - 57.8	B lens bh	4		clay	40m: 35°	100	87	
57.8 - 73.5	pgh	7		clay carbonate		100	77	
73.5 - 79.5	gh	7		nil	-	100	68	
79.5 - 97.0	banded gh bh/ph	5		clay	88m: 50° 94m: 60°	99	89	

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - ~~KING ISLAND~~

ASSAY DATA

D.D.H. No. ~~D040/10~~

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5795	40	41	1.0	1.0	0.01	< 0.01		
6	41	42	"	"	1.54	0.04		
7	42	43	"	"	0.64	0.01		
8	43	44	"	"	0.93	0.03		
9	44	45	"	"	0.01	< 0.01		
5800	60	61	1.0	1.0	0.25	< 0.01		
1	61	62	"	"	0.38	< 0.01		
2	62	63	"	"	0.01	< 0.01		
3	63	64	"	"	0.10	< 0.01		
D5804	70	71	1.0	1.0	0.48	0.01		
5	71	72	"	"	0.12	< 0.01		
6	72	73	"	"	0.08	< 0.01		
7	73	74	"	"	< 0.01	< 0.01		
8	74	75	"	"	< 0.01	< 0.01		
9	75	76	"	"	0.30	0.01		
10	76	77	"	"	0.94	0.03	C lens 75 - 79m	
1	77	78	"	"	0.96	0.04	4m @ 0.78% WO_3	
D5812	78	79	"	"	0.92	0.03		
3	79	80	"	"	< 0.01	< 0.01		
D5838	82	83	1.0	1.0	< 0.01	< 0.01		
9	83	84	"	"	0.36	0.01		
40	84	85	"	"	0.22	< 0.01		
D5841	85	86	"	"	0.24	< 0.01		

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/10

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	
D5798	0.93	0.03	D5914	0.92		D5915	1.14		D5916	1.11		
5804	0.48	0.01	5917	0.49		5918	0.62		5919	0.58		
5840	0.22	0.01	5920	0.18		5921	0.32		5922	0.25		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No.D040/10

0.0 - 22.7 UPPER METAVOLCANICS

A pale grey green to brown rock strongly fragmental texture and the unit contains abundant white mica(?) very obvious on fracture surfaces. Pale green clay and dark green montmorillonite are common on fracture surfaces.

Occasional specks only of yellow flourescing scheelite occur at 7.5m and 8.6m. Amount of mineralisation would be below assay limit of detection.

22.7 - 35.7 BIOTITE HORNFELS

A barren grey black fine grained unit containing increasing green-grey pyroxene/actinolite towards base. Contact point with underlying unit is gradational.

35.7 - 43.9 B LENS

Biotite pyroxene hornfels 35.7 - 40.9

Barren black (bh) green (ph) rock. Pyroxene occupies approx. 20% volume of unit and some ph bands contain minor sulphide.

Garnet pyroxene hornfels 40.9 - 43.9

A dominantly green pyroxene rock with minor development of carbonate and grossular garnet. Moderate disseminated scheelite
41.55 - 41.70 and
42.1 - 43.9m

43.9 - 58.5 BIOTITE HORNFELS

Barren grey black fine grained biotite hornfels.

58.5 - 75.0 PYROXENE GARNET HORNFELS

Typical green groundmass with grossular garnet rimmed carbonate ovoids.

Weak disseminated scheelite 60.2 - 63.5m and
69.7 - 75.0m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 040/10

75.0 - 78.7 GARNET HORNFELS

Medium grained andradite garnet skarn containing high grade disseminated scheelite. Lower contact with a barren grey marble is sharp.

78.7 - 82.7 MARKER HORIZON (?)

A variety of rock types as follows-

Marble 78.7 - 80.1

Barren grey ch.

Pyroxene hornfels 80.1 - 80.8

Barren green ph.

Garnet pyroxene hornfels 80.8 - 81.2

Pyroxene rich andradite hornfels. Minor disseminated scheelite.

Marble 81.2 - 82.0

Barren white ch.

Biotite hornfels 82.0 - 82.7

Barren grey black bh.

82.7 - 85.5 BANDED GARNET HORNFELS

Strongly carbonate rich banded andradite skarn containing minor disseminated scheelite.

85.5 - 96.0 BANDED BIOTITE PYROXENE HORNFELS

Thinly bedded grey bh and green ph. Minor grossular garnet development and unit appears gradational between banded footwall beds and banded bh/ph.

No mineralisation.

96.0 - 97.0 APLITE

E.O.H.

Fine grained barren pink aplite.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. Dolphin 040/9

PLANNING

Proposer: M. Danielson **Depth:** 85

Location: J 9 -150m R.L.

Purpose of hole: C lens ore blocking south of Swan and Gull Faults.

Co-ordinates: 220 040 E 563 950 N
Inclination: -77°
Bearing 360° Grid **Magnetic:**
Target: E N **Target Depth:**
Approved by: M.C. Rogers **Date:** 1/5/77

SURVEY

Survey Co-ords: E N
Survey bearing: 356° 30' Grid **Magnetic:**
Surveyed in by: **Date:**
Actual Co-ords: 220 040.06 E 563 951.87 N
R.L. of Collar: F - 148.6 **Inclination of Hole:** -77° 20'
Picked up by: R.J.H. **Date:** 2/6/77

SUMMARY

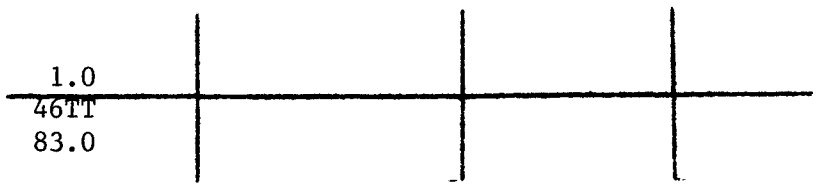
Logged by: M. Danielson
Results: C lens 53 - 58m 5m @ 0.42% WO_3

DRILLING

Driller/Contractor: A.D.D

Date commenced: 21/5/77 **Date terminated:** 28/5/77

Casing: Size:
Depth: 1.0
Core: Size: 46TT
Depth: 83.0



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

Extension: Nil
Reason for termination: Hole passed into unmineralised footwall hornfels

Condition of hole on completion: **Final depth:** 83.0m
Casing: No
Cemented: Yes
Bore hole survey: Multishot to 82.0m
Water: No

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D040/9

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 5	5.0	5.0	100
6.5	1.5	1.5	100
9.5	3.0	3.0	100
12.5	3.0	3.0	100
15.5	3.0	3.0	100
18.8	3.3	3.3	100
21.8	3.0	3.0	100
24.8	3.0	3.0	100
27.8	3.0	3.0	100
30.8	3.0	3.0	100
33.8	3.0	3.0	100
37.0	3.2	3.2	100
40.0	3.0	3.0	100
43.0	3.0	3.0	100
46.0	3.0	3.0	100
49.2	3.2	3.2	100
52.2	3.0	3.0	100
55.2	3.0	2.9	97
58.2	3.0	3.0	100
61.2	3.0	2.9	97
64.6	3.4	3.4	100
67.3	2.7	2.6	96
70.3	3.0	2.8	93
71.0	0.7	0.7	100
74.0	3.0	3.0	100
77.0	3.0	3.0	100
80.0	3.0	3.0	100
83.0	3.0	3.0	100
E.O.H.			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/9

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 - 15.5	Upper Volc	4		clay minor chlorite pyrite		100	77	
15.5 - 40.0	bh	5		clay		100	81	
40.0 - 52.2	bh/ph	7		clay		100	77	
52.2 - 83.0	bfb	5		clay carbonate	56m 70° 63m 60° 70m 55° 78m 60°	98	82	

FURTHER DATA & REMARKS

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

   46TT =36mms dia.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 040/9

Survey method: Multishot camera
Final depth : 83.0m
Casing depth : 1m

Depth surveyed to: 82.0
Date surveyed: 28/5/77
Surveyed by : L. Denby
Checked by : M.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
22	355	345	12.25	77.75	21.49	4.50	1.21
40	351	341	12	78	39.09	8.11	2.26
63	340	330	10.75	79.25	61.64	12.18	4.09
82	339	329	10.75	79.25	80.31	15.25	5.91

REMARKS:

GEOPEKO LIMITED - King Island

ASSAY DATA

D.D.H. No. D 040/9

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5744	52	53	1.0	1.0	<0.01	<0.01		
5	53	54	"	"	0.26	<0.01		
6	54	55	"	"	0.63	0.04	C lens 53 - 58m	
7	55	56	"	"	0.04	0.01	5m @ 0.42% WO_3	
8	56	57	"	"	0.26	<0.01		
9	57	58	"	"	0.91	0.02		
D5750	58	59	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/9

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	
D5749	0.91	0.02	D5911	0.90		D5912	1.31		D5913	1.16		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 040/9

0 - 14.5	UPPER METAVOLCANICS
	A grey brown rock containing abundant micas. Strongly fragmental texture.
14.5 - 41.0	BIOTITE HORNFELS
	Between 14.5 and 20m core is strongly spotted but below 20m becomes a typical fine grained massive grey black unmineralised biotite hornfels.
41.0 - 47.5	BIOTITE PYROXENE HORNFELS
	Dominantly a barren grey black biotite hornfels containing up to 30% green pyroxene as irregular shaped interbeds. Minor sulphide in some blebs. Appears to be a B lens(?) type unit.
47.5 - 52.6	BIOTITE HORNFELS
	Barren grey biotite hornfels. Minor (<10%) green pyroxene.
	Unit is weakly sheared with strong mica development 48.5 - 49.5 but does not look like a fault.
52.6 - 57.5	MINERALISED BANDED FOOTWALL BEDS
	Upper contact of this unit is definitely stratigraphic and not faulted.
	Upper most 0.3m of this unit vaguely resembles pgh but maybe disturbed bfb. Mineralisation is very patchy and most of this unit is suboregrade.
57.5 - 83.0 E.O.H.	UNMINERALISED BANDED FOOTWALL BEDS
	Typical stronly bedded bh, ph, grossular garnet and barren white grey marble. Very minor disseminated scheelite. 68.6 - 68.8 71.0 - 71.1

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO.D 040/8

PLANNING

Proposer: M. Danielson — **Depth:** 80m

Location: J9 -150m R.L.

Purpose of hole: C lens oreblocking

Co-ordinates: 220 040 E 563 950 N
Inclination: -55 **Magnetic:**
Bearing 360 Grid **Target Depth:**
Target: E N
Approved by: M.C. Rogers **Date:** 1/5/77

SURVEY

Survey Co-ords: , , E N
Survey bearing: 359 30 Grid **Magnetic:**
Surveyed in by: **Date:**
Actual Co-ords: 220 040.08 E 563 952.29 N
R.L. of Collar: F - 148.5 **Inclination of Hole:** -56° 50'
Picked up by: R.J.H, **Date:** 2/6/77

SUMMARY

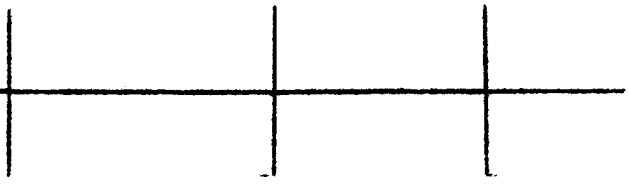
Logged by: M. Danielson
Results: B lens 36 - 38m 2m @ 0.47%
C lens 61 - 63m 2m @ 0.35%

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 16/5/77 **Date terminated:** 21/5/77

Casing: **Size:** BXTT
Depth: 1.0
Core: **Size:** 46TT
Depth: 78.0



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

Extension: Nil

Reason for termination: Hole below ore horizon in aplite.

Condition of hole on completion: **Final depth:** 78.0m
Casing: NO
Cemented: YES

Bore hole survey: Multishot to 76.0m

Water: NO

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D040/8

Survey method: Multishot camera
Final depth : 78.0m
Casing depth : 1m

Depth surveyed to: 76.0m
Date surveyed: 21/5/77
Surveyed by : L. Denby
Checked by : M.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	W
22	002	352	34	56	18.24	12.14	2.02
40	359	349	33	57	33.34	21.73	3.98
55	359	349	32.75	57.25	45.99	29.66	5.32
64	007	357	32.5	57.5	53.58	34.45	5.85
76	359	349	32	58	63.73	40.70	7.14

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 040/8

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 0.6	0.6	.45	75
3.4	2.8	2.7	96
4.9	1.5	1.5	100
6.4	1.5	1.5	100
9.4	3.0	3.0	100
12.4	3.0	3.0	100
15.4	3.0	3.0	100
18.4	3.0	3.0	100
21.4	3.0	3.0	100
24.4	3.0	3.0	100
27.4	3.0	3.0	100
30.4	3.0	3.0	100
33.4	3.0	3.0	100
36.4	3.0	3.0	100
40.0	3.6	3.6	100
43.0	3.0	3.0	100
46.0	3.0	2.9	97
49.0	3.0	3.0	100
55.0	3.0	3.0	100
58.0	3.0	3.0	100
61.0	3.0	3.0	100
64.0	3.0	3.0	100
67.0	3.0	2.8	93
70.0	3.0	3.0	100
72.0	2.0	2.2	110
73.5	1.5	1.5	100
76.3	2.8	2.8	100
78.0	1.7	1.7	100
E.O.H.			

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/8

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 - 12.4	UV	4		clay minor chlorite		98	52	
12.4 - 36.4	bh bh/ph	5		clay	31m: 80°	100	84	
36.4 - 55.0	B lens ch	4		carbonate clay		99	82	
55.0 - 70.0	bh, granitised sediment, footwall hornfels	6		clay	63m: 65°	99	81	
70.0 - 78.0	aplite	6		clay pyrrhotite		102	71	

FURTHER DATA & REMARKS

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

   46 TT = 36mms dia.

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. D 040/8

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D5704	36	37	1.0	1.0	0.67	0.01		
D5705	37	38	"	"	0.27	0.01		
6	38	39	"	"	<0.01	<0.01		
7	39	40	"	"	0.12	<0.01		
8	40	41	"	"	<0.01	<0.01		
9	41	42	"	"	<0.01	<0.01		
10	42	43	"	"	0.20	<0.01		
1	57	58	1.0	1.0	0.42	0.05		
2	58	59	"	"	0.24	0.09		
3	59	60	"	"	<0.01	0.23		
4	60	61	"	"	0.01	<0.01		
5	61	62	"	"	0.38	0.01		
6	62	63	"	"	0.32	<0.01		
7	63	64	"	"	0.07	<0.01		
8	70	71	"	"	<0.01	0.15		
9	71	72	"	"	<0.01	<0.01		
20	72	73	"	"	0.22	<0.01		
1	73	74	"	"	2.44	0.06		
2	74	75	"	"	1.09	0.13		
3	75	76	"	"	0.49	0.01		
4	76	77	"	"	0.05	0.01		
5	77	78	"	"	8.90	0.12		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/8

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	
D5704	0.67	<0.01	D5902	0.60		D5903	0.78		D5904	0.69		
5716	0.32	<0.01	5905	0.41		5906	0.43		5907	0.38		
5722	1.09	0.13	5908	1.10		5909	1.22		5910	1.27		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. DOLPHIN 040/8

0 - 11.9	UPPER METAVOLCANICS

Generally a greenish grey rock containing abundant mica. Texture is mottled green and grey and extremely variable. Appears fragmental in part.

11.9 - 30.0	BIOTITE HORNFELS

Barren grey brown biotite hornfels.

Spotted hornfels 28 - 29m.

30.0 - 36.0	BIOTITE PYROXENE HORNFELS

Approximately 75% brown biotite hornfels with 25% green pyroxene. The pyroxene interbeds occasionally contain minor pyrrhotite in elongate blebs.

36.0 - 54.1	B LENS

This complete unit is essentially a barren grey marble. Minor green pyroxene and pale pink grossular garnet is weakly developed in places often containing minor disseminated scheelite. Mineralisation best developed between 36 - 40m.

54.1 - 56.7	BIOTITE HORNFELS

Barren grey brown fine grained bh.

56.7 - 63.6	GRANITISED SEDIMENT

Fine to medium grained quartz rich and often pyrrhotite rich rock containing minor scheelite in small (<1 cm) coarse blue flourescing grains.

Between 56.7 - 61.0 the unit is massive but below 61.0 the granitising influence appears weaker and some ungranitised weakly mineralised banded garnet hornfels occurs. In this section the scheelite is finely disseminated yellow flourescing

63.6 - 69.6	BANDED FOOTWALL HORNFELS

Dominately a barren banded biotite pyroxene hornfels with minor development of pale pink grossular garnet.

69.6 - 78.0 E.O.H.	MINERALISED APLITE

Fine to medium grained granitic rock containing moderate blue flourescing (minor yellow) coarse (1 cm) grains of scheelite.

Minor pyrrhotite throughout.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. Dolphin 040/7

PLANNING

Proposer: Dolphin - M Danielson — Depth: 50m

Location: C 08 stope -150m R.L.

Purpose of hole: Test C lens south of P fault

Co-ordinates: 220 040 E 564 010 N
Inclination: -48.5°
Bearing 170 Grid
Target: E N
Approved by: M.C. Rogers — Date: 1/2/77

SURVEY

Survey Co-ords: - E N
Survey bearing: 158° 40' Grid — Magnetic:
Surveyed in by: — Date:
Actual Co-ords: 220 034.1 E 564012.0 N
R.L. of Collar: F - 155.7 — Inclination of Hole: -52° 40'
Picked up by: R.J. H. — Date: 9/2/77

SUMMARY

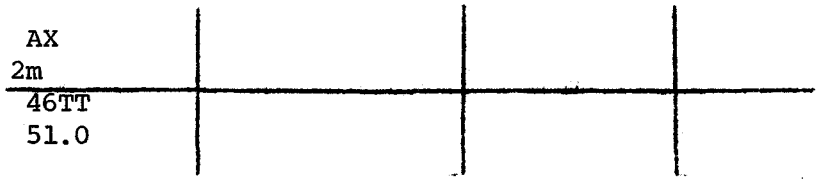
Logged by: M. Danielson
Results: C lens 1-10m 9m @ 1.46% WO_3
B lens 24 - 26m, 2m @ 0.69% WO_3
B lens 33 - 37m, 4m @ 0.34% WO_3

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 4/2/77 — Date terminated: 11/2/77

Casing: Size: AX
Depth: 2m
Core: Size: 46TT
Depth: 51.0



Wedge Runoff: -
Wedge placed: - — Depth:
Proposed by: — Approved by:
Reason:

Extension: Nil
Reason for termination: Hole into unmineralised footwall hornfels

Condition of hole on completion: — Final depth: 51.0m
Casing: 2m AX remains
Cemented: No
Bore hole survey: No multishot in Victoria for repair
Water: No

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. Dolphin 040/7

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.4	3.4	2.67	79
6.4	3.0	2.97	99
9,4	"	2.93	98
12.4	"	2.93	98
15.4	"	2.97	99
18.5	3.1	2.84	92
21.5	3.0	2.97	99
24.5	"	2.95	98
27.5	"	3.0	100
30.5	"	3.02	101
33.5	"	2.84	95
36.5	"	2.91	97
39.5	"	2.96	99
42.5	"	2.90	97
45.5	"	3.00	100
48.5	"	3.05	102
51.0	2.5	2.41	96

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/7

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 15.4	pgh gh	4		clay	Nil	94	73	Fault zone 13.9 - 16.0 Sheared bh, CO_3 veining
15.4 - 36.5	B lens	4		carbonate	22m: 25°	97	73	
36.5 - 42.5	B lens	+10		clay	-	98	44	39 - 40m clay recemented breccia
42.5 - 51.0	bh	8		clay	-	100	51	

FURTHER DATA & REMARKS

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

34mm dia.

GEOPEKO LIMITED - Dolphin

ASSAY DATA

D.D.H. No. D 040/7

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 5479	0	1	1.0	0.85	<0.01	<0.01		
80	1	2	"	0.85	1.23	0.04		
1	2	3	"	1.0	3.03	0.05		
2	3	4	"	"	0.20	0.01	C lens 1 - 10m	
3	4	5	"	"	0.50	0.01		
4	5	6	"	"	<0.01	<0.01	9m @ 1.46% WO_3	
5	6	7	"	"	1.06	0.03		
6	7	8	"	"	2.36	0.08		
7	8	9	"	"	2.94	0.10		
8	9	10	"	"	1.85	0.07		
9	10	11	"	"	0.22	0.01		
90	11	12	"	"	0.22	0.01		
D 5491	12	13	"	"	0.48	0.02		
D 5492	18	19	1.0	1.0	0.02	0.01		
3	19	20	"	"	0.30	0.01		
4	20	21	"	"	<0.01	<0.01		
5	21	22	"	"	<0.01	<0.01		
6	22	23	"	"	0.07	<0.01		
7	23	24	"	"	<0.01	0.03		
8	24	25	"	"	0.94	0.02	B lens 24 - 26m	
9	25	26	"	"	0.44	0.01	2m @ 0.69% WO_3	
D 5500	26	27	"	"	0.18	<0.01		
1	27	28	1.0	1.0	0.17	<0.01		
2	28	29	"	"	0.29	0.01		
3	29	30	"	"	0.09	<0.01		
4	30	31	"	"	0.11	<0.01		
5	31	32	"	"	<0.01	<0.01		
6	32	33	"	"	0.03	<0.01		
7	33	34	"	"	0.32	0.01		
8	34	35	"	"	0.18	0.02	B lens 33 - 37m	
9	35	36	"	"	0.54	0.02		
10	36	37	"	"	0.33	0.01	4m @ 0.34% WO_3	
1	37	38	"	"	0.16	0.06		
2	38	39	"	"	0.23	0.02		
3	39	40	"	"	0.14	0.01		
4	40	41	"	"	0.24	0.01		
D 5515	41	42	"	"	<0.01	0.01		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. # 040/7

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	
D5483	0.50	0.01	D5595	0.42		D5596	0.49		D5597	0.45		
D5498	0.94	0.02	D5598	0.82		D5599	0.96		D5600	0.79		
D5510	0.33	0.01	D5601	0.34		D5602	0.37		D5603	0.21		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 040/7

0 - 1.5m	PYROXENE GARNET HORNFELS Weakly mineralised typical green pgh with minor grossular garnet and carbonate ovoids < 2cm dia.
1.5 - 3.0	GARNET HORNFELS Massive fine to medium grained andradite skarn. High grade finely disseminated mineralisation.
3.0 - 7.0	PYROXENE GARNET HORNFELS Same as pgh unit described above. Dyke: 5.6 - 6.4m.
7.0 - 10.0	GARNET HORNFELS High grade mineralised medium grained andradite garnet skarn.
10.0 - 13.9	PYROXENE GARNET HORNFELS Typical pgh. Green ph ground mass, carbonate ovoids up to 3cm dia rimmed by grossular garnet.
13.9 - 16.0	FAULT ZONE Sheared purplish brown biotite hornfels containing fine carbonate stringers. Quality of core is moderate to good and core loss is approximately 0.2m.
16.0 - 42.5	B LENS (?) Pyroxene hornfels - 16.0 - 19.0 Barren grey green ph. Marble - 19.0 - 36.0 Weakly mineralised grey ch with minor green ph. No prominent bedding. Biotite Hornfels - Marble - 36.0 - 39.0 A mixture of barren grey bh, green ph and minor skarns and marble. Breccia Zone - 39.0 - 40.0 Fragmental biotite hornfels recemented by clay minor carbonate. Biotite Pyroxene Calcite Hornfels - 40.0 - 42.5 A mixture of barren silicate hornfels and barren marbles, very minor skarn.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. Dolphin 040/7

42.5 - 51.0	BIOTITE HORNFELS

Barren grey green hangingwall biotite hornfels.

51.0m EOH

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. D 040/6

PLANNING

Proposer: M. Danielson — Depth: 30m

Location: C 0756 Stope -150m RL

Purpose of hole: C lens testing

Co-ordinates:	220 040	E 564 025	N
Inclination:	-90		Magnetic:
Bearing		Grid	Target Depth:
Target:		E	N
Approved by:	M.C. Rogers		Date: 1/2/77

SURVEY

Survey Co-ords:		E	N
Survey bearing:	000'	Grid	Magnetic:
Surveyed in by:			Date:
Actual Co-ords:	220 039.7	E 564 025.1	N
R.L. of Collar:	F - 154.0		Inclination of Hole: Vertical
Picked up by:	R.J.H.		Date: 4/2/77

SUMMARY

Logged by: M. Danielson

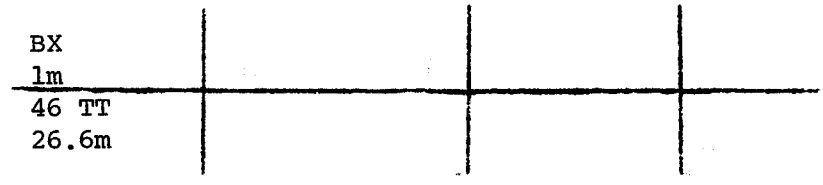
Results: C lens 0-1, 1m @ 1.19% WO_3

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 1/2/77 — Date terminated: 4/2/77

Casing:	Size:	BX
	Depth:	1m
Core:	Size:	46 TT
	Depth:	26.6m



Wedge Runoff:

Wedge placed: — Depth:

Proposed by: — Approved by:

Reason:

Extension: Nil

Reason for termination: Hole passed into unmineralised footwall beds

Condition of hole on completion: — Final depth: 26.6m

Casing: 1m BX remains

Cemented: No

Bore hole survey: Surveyed to 26m

Water: Nil

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. D 040/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.4	3.4	3.1	91
6.6	3.2	3.2	100
9.6	3.0	3.0	100
12.6	3.0	3.0	100
15.6	3.0	3.0	100
18.6	3.0	2.8	93
21.6	3.0	2.95	98
24.6	3.0	3.0	100
26.6	2.0	1.90	95
E.O.H.			

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. D 040/6

Survey method: Multishot camera
Final depth : 26.6m
Casing depth : 1m

Depth surveyed to: 26m
Date surveyed: 3/2/77
Surveyed by : A.T.
Checked by : M.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		N	W
15	335	325	3	87	14.99	0.52	0.17
26	330	320	3	87	25.97	0.96	0.54

REMARKS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No.D 040/6

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 26.6	banded gh banded bh/ph	4 Usually parallel to bedding planes		clay	4m: 70° 7m: 75° 13m: 50° 17m: 60° 21m: 45°	98	74	23.8 - 25.4 leached. Clay recemented breccia. Rubble: 24.2 - 24.6 26.4 - 26.6

FURTHER DATA & REMARKS

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

34.5mms dia.

GEOPEKO LIMITED - DOLPHIN

ASSAY DATA

D.D.H. No. D 040/6

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 5439	0	1	1.0	0.8	1.19	0.04		
40	1	2	"	1.0	0.15	0.01		
1	2	3	"	"	0.21	0.01		
2	3	4	"	"	0.36	0.01		
3	4	5	"	"	0.01	0.01		
4	5	6	"	"	0.06	0.01		
5	6	7	"	"	0.01	0.01		
6	7	8	"	"	0.48	0.03		
7	8	9	"	"	0.53	0.03		
D 5448	9	10	"	"	0.08	0.01		

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. OD 040/6

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	
D5446	0.48	0.03	D5592	0.40		D5593	0.44		D5594	0.45		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. DOLPHIN 040/6

0 - 4,0	BANDED GARNET HORNFELS Fine grained andradite skarn and interbedded pale green pyroxene, minor grossular garnet. Very weak disseminated mineralisation.
4.0 - 26.6	BANDED BIOTITE PYROXENE HORNFELS Mostly a fine grained barren banded grey, brown and green rock. Dyke 5.4 - 7.2 cutting core at 20° to L.A.O.C. Between 7.2 - 9.0 some andradite skarn is developed with very weak mineralisation. Below 16m there is minor grossular garnet and carbonate present but unit is dominantly banded biotite, actinolite, pyroxene hornfels. Dyke 22.9 - 24.0 Core is leached and brecciated below 23.8 and is held together in a clay carbonate matrix. Core is rubble between 24.2 - 24.6 and 26.4 - 26.6m Possible fault at end of this hole.
26.6m E.O.H.	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. 040/5

PLANNING

Proposer: M.J. Danielson — Depth: 110m.

Location: G14 ramp.

Purpose of hole: C lens oreblocking

Co-ordinates: 220 040 E 564 075 N
Inclination: -57° Magnetic:
Bearing 180 Grid Target Depth:
Target: E N
Approved by: M.C. Rogers. Date: 1/3/76

SURVEY

Survey Co-ords: E N
Survey bearing: 177°20' Grid Magnetic:
Surveyed in by: Date:
Actual Co-ords: 220 040.0 E 564 074.9 N
R.L. of Collar: -67.9 Inclination of Hole: -54°30'
Picked up by: R.J.H. Date: 24/3/76

SUMMARY

Logged by: M.J. Danielson
Results: B lens 42 - 44m 2m @ 1.43% WO_3
C lens 82 - 112 30m @ 1.19% WO_3
C lens114 - 118 4m @ 0.92% WO_3. C lens 121 - 136m 15m @ 1.14%WO_3

DRILLING

Driller/Contractor: A.D.D.

Date commenced: 19/3/76 Date terminated: 8/4/76

Casing:	Size:	BX			
	Depth:	1.5			
Core:	Size:	NQ	BQ		
	Depth:	1.5	137.4		

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

Extension: Nil
Reason for termination: Hole passed below C lens mineralisation.

Condition of hole on completion: Final depth: 137.4m.
Casing: 1.5m BX remains
Cemented: Yes
Bore hole survey: Surveyed to 135.0m.
Water: Nil

Comments on drilling conditions: Difficulty in collaring hole probably due to fault in upper part of hole.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. D 040/5

Survey ~~Depth~~ method: Multishot camera

Final Depth : 137.4

Casing depth: 1.5m

Depth surveyed to: 135.0

Date surveyed : 9.4.76

Surveyed by: M.J.D

Checked by : M.J.D

Depth (m)	Bearing		Inclination		True vertical depth	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	E
15	179.5	169.5	-35	-55	12.29	8.45	1.57
30	179	169	-34	-56	24.72	16.64	3.16
45	179	169	-34	-56	37.15	24.83	4.75
60	185	175	-32	-58	49.87	32.75	5.44
75	183.5	173.5	-29	-61	62.98	39.97	6.26
90	184	174	-28.5	-61.5	76.16	47.09	7.01
105	185	175	-28	-62	89.40	54.10	7.62
120	185	175	-28	-62	102.64	61.11	8.23
135	185	175	-28	-62	115.88	68.12	8.84

REMARKS:

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/5

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
0 - 11.4	bh	0 - 9.5 +20 9.5 - 11.4 5	5	clay carbonate		78	30	50- 9.5 core heavily broken - core lost clay and carbonate filled breccias.
11.4 - 20.4	bh	5		clay minor carbonate		98	64	shattered core 17.7 - 17.9
20.4 - 44.4	B lens	20-38 6 38-41 10		clay		98	87	broken ground 35.9 - 36.0 clay recemented breccia 42.4 - 42.5
44.4 - 68.4	bh	44-61 10 61-68 6		clay	49m 35° 65m 45°	98	53	Montmorillonite at 58.4 66.3 - 66.4
68.4 - 80.4	bh	7		clay, minor carbonate		100	67	broken ground 70.8 - 71.4
80.4 - 92.4	pgh gh	3		clay		100	94	
92.4 - 95.4	Marker	9		clay	94m 54°	97	53	clay recemented breccia at 93.0 - 93.1 95.0 - 95.2
95.4 - 119.4	banded gh	5		clay	103m 35° 110m 35° 117m 42° 120m 48° 125m 47°	99	92	clay recemented breccia 112.6 - 112.65

FURTHER DATA & REMARKS

1. Detailed % core recoveries within each depth interval is shown in the core recovery tabulation.
2. R.Q.D. (rock quality designation) $= \frac{\text{length core } >10 \text{ cms}}{\text{length drilled}}$ %
3. Core size. 0 - 1.5 NQ 47.6mms dia
   1.5 - 137.4 BQ 36.5mms dia

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. No. D 040/5

Depth Interval (metres)	Rock Type	Fractures /m.	Joint Angle (wrt LAOC)	Joint Filling	Bedding Angle (w.r.t. L.A.O.C.)	% Core Recovery	R.Q.D.	Remarks (weathering)
119.4 - 137.4	banded gn bh/ph	5		clay	130m 53° 136m 60°	99	87	

FURTHER DATA & REMARKS

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

GEOPEKO LIMITED - King Island

CORE RECOVERY

D.D.H. No. D 040/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 2.4	2.4	2.0	83
5.4	3.0	2.8	93
8.4	3.0	2.1	70
11.4	3.0	1.95	65
14.4	3.0	2.9	97
17.4	3.0	3.0	100
20.4	3.0	2.9	97
23.4	3.0	3.0	100
26.4	3.0	2.9	97
29.4	3.0	3.0	100
32.4	3.0	3.0	100
35.4	3.0	3.0	100
38.4	3.0	3.0	100
41.4	3.0	2.75	92
44.4	3.0	3.0	100
47.4	3.0	2.9	97
50.4	3.0	3.0	100
53.4	3.0	2.95	98
56.4	3.0	2.9	97
59.4	3.0	3.0	100
62.4	3.0	2.75	92
65.4	3.0	3.0	100
68.4	3.0	3.0	100
71.4	3.0	3.0	100
74.4	3.0	3.0	100
77.4	3.0	3.0	100
80.4	3.0	3.0	100
83.4	3.0	3.0	100
86.4	3.0	3.0	100
89.4	3.0	2.95	98
92.4	3.0	3.0	100
95.4	3.0	2.9	97
98.4	3.0	3.0	100
101.4	3.0	3.0	100
104.4	3.0	3.0	100
107.4	3.0	3.0	100
110.4	3.0	3.0	100
113.4	3.0	3.0	100
116.4	3.0	2.9	97
119.4	3.0	3.0	100
122.4	3.0	3.0	100
125.4	3.0	3.0	100
128.4	3.0	3.0	100
131.4	3.0	3.0	100
134.4	3.0	3.0	100
137.4	3.0	2.8	93

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. D 040/5

SAMPLE No.	DEPTH (METRES) From	To	Length	Length Recovered	ELEMENTS WO_3	Mo	COMMENTS
D4868	32	33	1.0	1.0	0.22	<0.01	
D4869	41	42	1.0	1.0	<0.01	<0.01	
70	42	43	1.0	1.0	0.45	<0.01	B lens 2m @
1	43	44	1.0	1.0	2.42	0.08	1.43% WO_3
D4872	44	45	1.0	1.0	<0.01	<0.01	
D4873	Cancelled	-------					
D4874	81	82	1.0	1.0	<0.01	<0.01	
5	82	83	1.0	1.0	4.07	0.14	
6	83	84	1.0	1.0	0.06	<0.01	
7	84	85	1.0	1.0	0.87	0.01	
8	85	86	1.0	1.0	1.41	0.01	
9	86	87	1.0	1.0	1.92	0.03	
80	87	88	1.0	1.0	4.00	0.11	
1	88	89	1.0	1.0	0.89	<0.01	
2	89	90	1.0	1.0	1.40	0.01	
3	90	91	1.0	1.0	0.89	<0.01	
4	91	92	1.0	1.0	0.70	<0.01	
5	92	93	1.0	1.0	0.80	<0.01	
6	93	94	1.0	1.0	0.24	<0.01	30m @ 1.19% WO_3
D4887	94	95	1.0	1.0	1.29	0.01	
8	95	96	1.0	1.0	0.10	<0.01	
9	96	97	1.0	1.0	0.42	<0.01	
90	97	98	1.0	1.0	0.96	0.01	
1	98	99	1.0	1.0	0.44	0.01	
2	99	100	1.0	1.0	1.43	0.05	
3	100	101	1.0	1.0	0.75	0.01	
4	101	102	1.0	1.0	0.28	<0.01	
5	102	103	1.0	1.0	1.40	0.04	
6	103	104	1.0	1.0	9.02	0.38	
7	104	105	1.0	1.0	0.88	0.01	
8	105	106	1.0	1.0	1.26	0.05	
9	106	107	1.0	1.0	0.46	0.01	
4900	107	108	1.0	1.0	0.94	0.03	
1	108	109	1.0	1.0	1.42	0.04	
2	109	110	1.0	1.0	0.45	<0.01	
3	110	111	1.0	1.0	0.44	<0.01	
4	111	112	1.0	1.0	1.75	0.07	
5	112	113	1.0	1.0	0.10	<0.01	
6	113	114	1.0	1.0	0.01	<0.01	
7	114	115	1.0	1.0	0.26	<0.01	
D4908	115	116	1.0	1.0	1.60	0.05	

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. No. D 040/5

SAMPLE No.	DEPTH (METRES) From	To	Length	Length Recovered	ELEMENTS WO_3	Mo	COMMENTS
9	116	117	1.0	1.0	0.64	<0.01	4m @ 0.92% WO_3
10	117	118	1.0	1.0	1.18	0.02	
1	118	119	1.0	1.0	0.14	<0.01	
2	119	120	1.0	1.0	0.18	<0.01	
3	120	121	1.0	1.0	0.12	<0.01	
4	121	122	1.0	1.0	5.90	0.20	
5	122	123	1.0	1.0	0.40	<0.01	
6	123	124	1.0	1.0	1.79	0.05	
7	124	125	1.0	1.0	1.00	0.01	
8	125	126	1.0	1.0	0.57	<0.01	
9	126	127	1.0	1.0	0.75	<0.01	
20	127	128	1.0	1.0	1.60	0.01	
1	128	129	1.0	1.0	0.85	<0.01	
2	129	130	1.0	1.0	1.06	0.01	15m @ 1.14% WO_3
3	130	131	1.0	1.0	0.65	<0.01	
4	131	132	1.0	1.0	0.42	<0.01	
5	132	133	1.0	1.0	0.28	<0.01	
6	133	134	1.0	1.0	0.42	<0.01	
7	134	135	1.0	1.0	2.89	0.06	
8	135	136	1.0	1.0	0.44	<0.01	
D4929	136	137	1.0	1.0	<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 040/5

LAB.	K.I.S.		LAB.	K.I.S.		LAB.	AMDEL		LAB.	ACSL		
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
D4872	<0.01		D5071	<0.01		D5072	0.064		D5073	0.021		
4882	1.40		5074	1.42		5075	1.50		5076	1.53		
4892	1.43		5077	1.40		5078	1.56		5079	1.47		
4902	0.45		5080	0.40		5081	0.45		5082	0.47		
4912	0.18		5083	0.17		5084	0.235		5085	0.22		
D4922	1.06		D5086	1.03		D5087	1.10		D5088	1.09		

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 040/5

0.0 - 21.2 BIOTITE HORNFELS

Dark grey to black, barren fine grained bh.

There is considerable core loss between 0.0 - 11.4 = 22% lost. Below 5.4 core is heavily broken, brecciated with abundant carbonate veining. There is approximately 1m core lost between 8.5 - 9.5m.

Below this point quality of core is good to moderate with minor carbonate veining.

21.2 - 44.0 B LENS

A variety of hornfels as follows:-

21.2 - 22.4 Marble
22.4 - 35.0 Garnet pyroxene hornfels
A variety of intermixed grossular garnet and pyroxene, minor bh and carbonate. Minor scheelite 32 - 33m.
35.0 - 42.4 Biotite pyroxene hornfels
Barren grey green hornfels.
42.4 - 44.0 Garnet pyroxene hornfels
High grade disseminated scheelite in a pyroxene rich grossular skarn.

44.0 - 78.2 BIOTITE HORNFELS

Barren grey black fine grained bh.

Clay recemented breccia 47.0 - 47.4m.

Montmorillonite on joint surfaces at 58.4 66.3 - 66.4. Broken ground 70.8 - 71.4.

Below 75 metres this unit is rich in pyroxene often exhibiting pods of pyrite up to 3cm diameter.

78.2 - 84.0 PYROXENE GARNET HORNFELS

Uppermost 2m of unit is very bh rich with occasional carbonate pods and minor grossular garnet. Below 80m the unit is very pyroxene and carbonate rich but does not show the distinctive podded texture of pgh.

Some coarse scheelite at 82.9 - 83.0 but otherwise the unit is unmineralised.

84.0 - 92.5 GARNET HORNFELS

Fine to medium grained brown andradite garnet skarn containing abundant finely disseminated scheelite.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D 040/5

92.5 - 95.5 MARKER HORIZON

A mottled variety of mostly barren or very weakly mineralised bh, ph, marble and grossular rich garnet skarn.

Clay recemented breccia 93.0 - 93.1
95.0 - 95.2

95.5 - 135.4 BANDED GARNET HORNFELS

Typical banded gh of the Lower C lens.

Dominantly a fine grained andradite skarn containing finely disseminated scheelite with barren interbeds of green ph and occasionally black bh.

ACID DYKE 112.6 - 114.0

Barren grey igneous textured rock.

Bedding is clearly defined in the banded skarn.

Mineralisation is moderate to 107m but becomes very patchy below this point.

135.4 - 137.4 BANDED BIOTITE PYROXENE HORNFELS

Thinly bedded barren brown bh and pale green ph.

137.4 E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO: D 040/4

PLANNING

Proposer: M. J. Danielson — Depth: 55 metres

Location: Dolphin Mine
Drill Cuddy 220040 E

Purpose of hole: Oreblocking

Co-ordinates: 220040 E 564105 N

Inclination: -17 — Target depth: 38 metres

Bearing: 360 ISG°Grid — °Magnetic

Target: - E - N

Approved by: M. C. Rogers — Date: 21.11.73

SURVEY

Survey Co-ords: - E - N

Survey bearing: 360ISG°Grid — °Magnetic

Surveyed in by: K.I.S. — Date: 21.11.73

Actual Co-ords: 220039.5 E 564107.2 N

R.L. of collar: -65.2 metres — Inclination of hole: -17°30'

Picked up by: M. Marchant — Date: 27.2.74

SUMMARY

Logged by: P. Volk

Results: C lens. 15 - 19 m at 4.22% WO_3

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 11.2.74 — Date terminated: 13.2.74

Casing:	Size :	~~HQ~~ BX				
	Depth:	1.52				
Core:	Size :	NQ	BQ			
	Depth:	1.52	43.08			

Wedge Runoff:

Wedge placed: — Depth:

Proposed by: — Approved by:

Reason:

Extension: Nil — Final depth: 43.08 metres

Reason for termination: Hole passed into quartzites.

Condition of hole on completion:

Casing : 1.5m BX

Cemented: Yes

Bore hole survey: Surveyed to 36.58 metres.

Water: Normal water pressure throughout.

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. NO. D 040/4

Survey method : Multishot Camera
Final depth : 43.08 m
Casing depth : 1.52 m

Depth surveyed to : 36.6 m
Date surveyed : 13.2.74
Surveyed by : V. Powell
Checked by : M. J. Danielson

DEPTH	Bearing		Inclination		True Vertical depth	Co-oridinates	
	Grid	Mag.	Read	Corrected		E W	N
6.1		351°		-17°30'		0.91	5.74
9.15		350°15'		-17°30'		1.40	8.61
12.2		351°		-17°15'		1.86	11.48
15.2		350°38'		-17°23'		2.32	14.35
18.3		351°		-17°45'		2.78	17.22
21.3		350°		-18°		3.29	20.07
24.4		351°		-18°		3.74	22.94
27.4		351°		-18°		4.19	25.80
30.5		351°		-17°53'		4.65	28.66
33.5		354°		-17°45'		4.95	31.55
36.6		352°		-18°		5.35	34.42

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 040/4

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 6.70		9			5m. 30°		78	
6.7 - 7.2						40		
7.2 - 9.0		8			7.5m. 60°		90	
9.0 - 10.25		+20					0	9.75 - 10.25 60% core recovery.
10.25 - 15.0		4					96	
15.0 - 21.0								Core split
21.0 - 21.36								Rubble
21.36 - 30.43		11			24m. 65°		55	
30.43 - 31.90						41		
31.90 - 43.08		9					69	42.5 - 43.08 34% core recovery.
E.O.H.								

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. NO.D 040/4

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length recovered	ELEMENTS WO_3	Mo		Check No	Check WO_3	Assays Mo	COMMENTS
1574	11	12	1.0	1.0	0.09	<0.01					
1575	12	13	"	"	0.45	<0.01					
C 1469	13	14	"	"	2.02	0.08		C 1736	2.40	0.07	
70	14	15	"	"	1.08	0.03					
C 0854	15	16	"	"	4.60	0.17	7m	2.45 C1739	4.4	0.21	
5	16	17	"	"	3.60	0.11					
6	17	18	"	"	6.70	0.19					
7	18	19	"	"	2.00	0.08					
8	19	20	"	"	0.19	0.01		C1738	0.18	<0.01	

SPECIFIC GRAVITY

Depth (m) :

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/4

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.	
C 0854	4.6	0.17				C 1739	4.4	0.21	D 2210	4.3	0.23	
0858	0.19	0.01	D 2188	0.14	0.01	1738	0.18	<0.01	2209	0.19	0.01	
1469	2.02	0.08	2178	2.10	0.07	1736	2.40	0.07	2234	2.30	0.08	
C 0854	4.6	0.17	D 2130	4.8	0.24	D 2402	5.0	0.26				
0858	0.19	0.01	2131	0.19	<0.01	2403	0.18	0.01				
1469	2.02	0.08	2132	1.93	0.08	2404	1.88	0.08				

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/4

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.	
C 0854	4.6	0.17	D 0261	4.22	0.18	D 0262	4.46	0.14				

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/4

0 - 5.60 BIOTITE PYROXENE HORNFELS

Predominantly biotite and pyroxene hornfels with some small irregular patches of grossular garnet between 1.00 and 1.83m. Moderately fractured throughout and more fractured between 3.70 and 4.00m. Barren except for large scheelite crystals in a calcite vein between 4.06 and 4.15m.

5.60 - 6.40 MARBLE

A well bedded grey marble, with very thin biotite bands at 30° to core axis.

6.40 - 7.45 BIOTITE PYROXENE HORNFELS

A highly fractured dark green hornfels composed mainly of pyroxene with minor biotite. Between 6.65 and 7.19m, 0.20m of core was lost. Carbonate veining throughout. Very minor scheelite mineralization.

7.45 - 7.88 MARBLE

A well bedded grey marble, with bedding at approx. 45° to core axis.

7.88 - 8.56 DISTURBED REGION

A highly fractured pyroxene hornfels with a very scheelite rich calcite vein with green feldspar. Also rich in molybdenite.

8.56 - 10.35 BIOTITE HORNFELS

The core is very broken. The bedding is at approx. 45° to core axis.

10.35 - 15.35 PYROXENE GARNET HORNFELS

Generally a greenish pyroxene rich rock with angular-subrounded "fragments" of calcite sometimes surrounded by grossular garnets. The fragments are not really ovoids; the majority are rectangular. Small marble band from 12.88 - 13.12m. Mineralization throughout is restricted to quartz veins. A large quartz vein running approx. parallel to the core axis from 13.51 to 14.20m, contains large sheelite crystals and light green feldspar.

15.35 - 16.46 GARNET SKARN

A typical andradite garnet skarn with minor green pyroxene. Well mineralized and carbonate veining is common.

16.46 - 17.06 PYROXENE GARNET HORNFELS

Typical pgh - unbedded and podded.

17.20 - 19.50 GARNET SKARN

As above. A barren region of pyroxene hornfels from 17.38 - 17.68m. Bedding at approx. 40° to core axis.

The ore grade between 15 - 19m averaged 4.23% WO_3 and 0.14% Mo.

19.50 - 24.95 PYROXENE GARNET BIOTITE HORNFELS

A well bedded unit, predominantly of pyroxene with biotite bands up to 0.40m and grossular garnet bands up to 0.10m, also minor carbonate veining. Unmineralized. Moderately fractured throughout and highly fractured at 21.25m.

24.95 - 28.75 BIOTITE HORNFELS

An unbedded, moderately fractured unit with some minor pyroxene.

28.75 - 29.73 MARBLE

A grey marble, moderately fractured, unmineralized and highly carbonate veined.

29.73 - 30.45 DISTURBED BIOTITE PYROXENE HORNFELS

30.45 - 31.10 CLAY SEAM FAULT POSITION

31.10 - 43.08 QUARTZITE

A typical grey competent quartzite to 34.90m where it becomes darker and highly spotted with biotite to 36.50m. From 36.50 - 43.08 typical grey quartzite but from 36.50 - 40.40 abundant chllorite on fractures impart a light green colour. Moderately fractured throughout. Small fracture zone of approx. 5cm at 36.50 - 36.55m.

E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO: D 040/3

PLANNING

Proposer: M. J. Danielson — Depth: 95 metres

Location: Dolphin Mine
220040 E Drill Cuddy.

Purpose of hole: Oreblocking

Co-ordinates: 220040 E 564105 N

Inclination: -55° — Target depth: 59 metres

Bearing: 180 ISG°Grid — °Magnetic

Target: - E - N

Approved by: M. C. Rogers — Date: 21.11.73

SURVEY

Survey Co-ords: - E - N

Survey bearing: 180ISG°Grid — °Magnetic

Surveyed in by: K.I.S. — Date: 21.11.73

Actual Co-ords: 220039.8 E 564101.1 N

R.L. of collar: - 65.7 — Inclination of hole: -54°33'

Picked up by: M. G. Marchant — Date: 15.3.74

SUMMARY

Logged by: M. J. Danielson

Results: C lens
84 - 91 7 m at 0.91% WO_3

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 8.3.74 — Date terminated: 22.3.74

Casing:	Size :	BX				
	Depth:	1.5				
Core:	Size :	NQ	BQ			
	Depth:	1.5	106.07			

Wedge Runoff:

Wedge placed: — Depth:

Proposed by: — Approved by:

Reason:

Extension: Nil — Final depth: 106.07 metres

Reason for termination: Hole passed into unmineralised footwall beds.

Condition of hole on completion:

Casing : 1.5 m BX

Cemented: Cemented on completion.

Bore hole survey: Surveyed to 103.63 metres.

Water:

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. NO. D 040/3

Survey method : Multishot Camera
Final depth : 106.07 m
Casing depth : 1.52 m

Depth surveyed to : 103.6 m
Date surveyed : 22.3.74
Surveyed by : G. Buckland
M. J. Danielson
Checked by : M. J. Danielson

DEPTH	Bearing		Inclination		True Vertical depth	Co-oridinates	
	Grid	Mag.	Read	Corrected		E	N S
15.2		168°		-55°	12.48	1.82	8.55
30.5		169°		-55°	24.97	3.48	17.13
45.7		167°45'		-55°20'	37.49	5.33	25.62
61.0		170°		-57°	50.27	6.77	33.53
76.2		172°30'		-57°	63.05	7.86	42.02
91.4		174°30'		-57°	75.83	8.81	50.26
103.6		174°30'		-57°	85.74	9.44	56.86

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 040/3

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
00 - 33.60	B lens banded hornfels & marbles	3			2m 45° 16m 60° 23m 25°		86	
33.60 - 35.12	ch	10			27m 30° 33m 25°		16	
35.12 - 39.62	ch	4			39m 28°		94	
39.62 - 45.72	bh	12		39.6 - 40.1 chlorite	43m 30°		42	
45.72 - 55.32	bh	9				53.2-54.2 50% loss	61	53.2 - 54.2 shattered gr.
55.32 - 70.71	bh	6			58m 40°		78	62 - 63 shattered gr.
70.71 - 84.42	pgh	5					86	
84.42 - 90.22	gh	6			92m 60°		87	
90.22 - 106.07	Banded footwall beds	7			97m 60° 104m 55°	100 - 103.2 20% loss	83	

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. NO. D 040/3

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length recovered	ELEMENTS WO_3	Mo		check No	check WO_3	Assays Mo	COMMENTS
C 1011	20	21	1.0	1.0	0.16	0.01					
C 1468	21	22	"	"	<0.01	<0.01					
C 1012	22	23	"	"	0.32	0.02		C1186	0.26	<0.01	
C 1013	23	24	"	"	0.68	0.03					
1573	24	25			<0.01	<0.01					
C 1015	75	76	1.0	1.0	0.35	0.02					
6	76	77	"	"	0.06	0.01					
7	77	78	"	"	0.09	0.01					
8	78	79	"	"	0.05	0.01					
9	79	80	"	"	0.07	0.01					
20	80	81	"	"	0.14	0.01					
1	81	82	"	"	0.22	0.01					
2	82	83	"	"	0.14	0.01					
3	83	84	"	"	0.10	0.01					
4	84	85	"	"	0.83	0.04		C1224	0.90	0.02	
5	85	86	"	"	1.06	0.06					
6	86	87	"	"	0.95	0.07					
7	87	88	"	"	1.24	0.07					7 m at
8	88	89	"	"	1.08	0.06					0.91% WO_3
9	89	90	"	"	0.86	0.05					
30	90	91	"	"	0.38	0.02					
1	91	92	"	"	0.03	0.01					
2	92	93	"	"	0.01	0.01					
3	93	94	"	"	0.02	0.01					
4	94	95	"	"	0.15	0.01					
5	95	96	"	"	0.44	0.02		C1226	0.46	0.01	
6	96	97	"	"	0.19	0.01					
7	97	98	"	"	0.30	0.02					
C 1038	98	99	"	"	0.39	0.03					

SPECIFIC GRAVITY

Depth (m) :

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. NO. D 040/3

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length recovered	ELEMENTS WO_3	Mo		check No	check WO_3	assay Mo	COMMENTS
C 1039	99	100	1.0	1.0	0.68	0.04					
40	100	101	"	"	0.16	0.01					
1	101	102	"	0.6	0.12	0.01					
C 1042	102	103	"	1.0	0.16	0.01		C1043	0.18	<0.01	

SPECIFIC GRAVITY

Depth (m) :

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/3

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.
C 1012	0.32	0.02	D 2160	0.30	< 0.01	C 1761	0.26	< 0.01	D 2203	0.32	< 0.01
1024	0.83	0.04	2183	0.82	0.02	1762	0.90	0.02	2202	0.90	0.03
1035	0.44	0.02	2176	0.44	0.01	1763	0.46	0.01	2218	0.48	0.02
1042	0.16	0.01	2166	0.16	< 0.01	1764	0.18	< 0.01	2219	0.20	< 0.01
C 1012	0.32	0.02	D 2126	0.25	0.01	D 2398	0.24	0.01			
1024	0.83	0.04	2127	0.94	0.03	2399	0.94	0.04			
1035	0.44	0.02	2128	0.48	0.02	2400	0.49	0.02			
1042	0.16	0.01	2129	0.20	0.01	2401	0.21	0.01			

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/3

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.	
C 1035	0.44	0.02	D 0259	0.88	0.04	D 0260	0.60	0.01				

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/3

Core Size: 0 - 1.52 NQ
1.52 - 106.07 BQ

0 - 1.10 BIOTITE HORNFELS

Broken, black, massive, fine grained hornfels.

1.10 - 11.79 BANDED B LENS HORNFELS

Banded pyroxene grossular garnet hornfels with minor interbedded biotite and carbonate hornfels. Minor andradite garnet skarns developed with moderate scheelite e.g. 8.72 - 9.06 m. Bedding 2.0 m 45° L.A.O.C.

11.79 - 14.75 BANDED BIOTITE PYROXENE HORNFELS

Mostly biotite hornfels with beds of pyroxene hornfels up to 3 cms wide. Minor carbonate. No mineralisation. Bedding 13.0 m 35° L.A.O.C.

14.75 - 26.90 PYROXENE HORNFELS

This is a mixture of several rock types but the dominant is a pale green pyroxene hornfels. There is minor pale pink grossular garnet which in places develop into a andradite skarn with moderate disseminated scheelite. e.g. 20.14 - 21.0 m
22.23 - 22.75.m.
This unit is very carbonate rich between 22.60 - 23.10 m and 23.80 - 24.90 m.
Bedding 16.0 m 60° L.A.O.C.
23.5 m 25° L.A.O.C.
26.8 m 30° L.A.O.C.

26.90 - 39.62 MARBLE

A dirty grey barren marble. Typical B lens marble. The marble is pyroxene hornfels rich 33.83 - 34.70 m, and the core is heavily fractured and appears leached in this area. Bedding 29.5 m 25° L.A.O.C.
32.6 m 25° L.A.O.C.
38.6 m 28° L.A.O.C.
The marble exhibits no mineralisation whatsoever.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/3

39.62 - 70.90 HANGINGWALL BIOTITE HORNFELS

Typical purplish grey brown barren fine grained hornfels. Some bedding apparent at 58 m 40° L.A.O.C.

70.90 - 84.42 PYROXENE GARNET HORNFELS

Green pyroxene hornfels with carbonate pods up to 6 cms diameter. Very weak disseminated scheelite. Moderate scheelite 75.30 - 75.50 m. No noticeable bedding.

84.42 - 90.22 GARNET HORNFELS

Moderate to heavily mineralised andradite garnet skarn. Medium to coarse grained with very fine disseminated scheelite.

90.22 - 106.07 BANDED FOOTWALL BEDS

Partially mineralised biotite hornfels - pyroxene hornfels - garnet hornfels and calcite hornfels. Weak development of andradite skarn in places, e.g. 97.5 - 103 m with accompanying fine disseminated scheelite.

Bedding:
92 m 60° L.A.O.C
94 m 55° L.A.O.C
97 m 60° L.A.O.C.
103 m 60° L.A.O.C.
104 m 55° L.A.O.C.

106.07 metres E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO: D 040/2

PLANNING

Proposer: M. J. Danielson — Depth: 70 metres

Location: Dolphin Mine
220040 E drill cuddy.

Purpose of hole: Oreblocking

Co-ordinates: 220040 E 564105 N

Inclination: -77° — Target depth: 39 metres

Bearing: 180 ISG°Grid — °Magnetic

Target: - E - N

Approved by: M. C. Rogers — Date: 21.11.73

SURVEY

Survey Co-ords: - E - N

Survey bearing: 180ISG°Grid — °Magnetic

Surveyed in by: K.I.S. — Date: 21.11.73

Actual Co-ords: 220039.8 E 564101.6 N

R.L. of collar: -65.9 — Inclination of hole: -77°

Picked up by: M. Marchant — Date: 27.2.74

SUMMARY

Logged by: M. J. Danielson

Results: C lens. 65 - 68 3 m at 1.19%

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 27.2.74 — Date terminated: 8.3.74

Casing:	Size :	BX				
	Depth:	1.52				
Core:	Size :	NQ	BQ			
	Depth:	1.52	83.24			

Wedge Runoff:

Wedge placed: — Depth:

Proposed by: — Approved by:

Reason:

Extension: Nil — Final depth: 83.24 metres

Reason for termination: Hole passed into unmineralised footwall beds.

Condition of hole on completion:

Casing : 1.52 m BX casing remaining.

Cemented: Cemented on completion.

Bore hole survey: Surveyed to 82.3 metres.

Water: Normal water pressure throughout.

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. NO. D 040/2

Survey method : Multishot Camera
Final depth : 83.24 m
Casing depth : 1.52 m

Depth surveyed to : 82.3 m
Date surveyed : 8.3.74
Surveyed by : V. Powell
Checked by : M. J. Danielson

DEPTH	Bearing		Inclination		True Vertical depth	Co-oridinates	
	Grid	Mag.	Read	Corrected		E	N S
15.2		172°		-76°53'	14.83	0.59	3.43
30.4		175°15'		-76°45'	29.67	1.00	6.86
45.7		183°30'		-76°38'	44.52	1.09	10.29
61.0		185°30'		-76°30'	59.33	0.79	13.85
76.20		184°30'		-76°	74.12	0.46	17.47
82.30		185°		-76°	80.03	0.34	18.91

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 040/2

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 5.85	Ph	7		clay	3m. 45°		63	4.22 - 5.32 78% core recovery.
5.85 - 18.79	ch	5			16m. 50°		85	
18.79 - 23.96	bh/ph	11					56	
23.96 - 30.90	ch	5			26m. 30°		81	
30.90 - 49.68	bh	8			47m. 70°		55	
49.68 - 74.90	pgh/gh	6					65	67.5 - 70.0 core split by longi-tudinal fractures.
74.90 - 83.24 E.O.H.	bh/ph	7			77m. 50° 79m. 45° 81m. 70°		46	75.48 - 77.11 51% core recovery.

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. NO. D 040/2

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length recovered	ELEMENTS WO_3	Mo		CMD No	check WO_3	Assay Mo	COMMENTS
C 0879	64	65	1.0		0.02	0.02					
80	65	66	"		1.75	0.09		CM51	2.25	0.09	3 m at 1.19% WO_3
1	66	67	"		1.41	0.04					
2	67	68	"		0.42	0.02					
3	68	69	"		0.09	0.01		8m 0.[illegible]			
4	69	70	"		0.38	0.02					
5	70	71	"		0.15	0.02					
6	71	72	"		0.37	0.02					
C 0887	72	73	"		0.49	0.02		C1709	0.49	<0.01	
C 1512	73	74			0.01	<0.01					

SPECIFIC GRAVITY

Depth (m) :

Rock Type :

S.G. :

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/2

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.
C 0880	1.75	0.09	D 2164	1.76	0.07	C 1751	2.25	0.09	D 2231	2.10	0.10
C 0887	0.49	0.02				1749	0.49	<0.01	2230	0.51	0.01
C 0880	1.75	0.09	D 2124	1.98	0.09	D 2396	1.98	0.09			
C 0887	0.49	0.02	2125	0.48	0.02	2397	0.49	0.02			

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/2

Core sizes: 0 - 1.22 m NQ
1.22 - 83.24 m BQ

0 - 30.90 B LENS

0 - 6.50 Pyroxene grossular hornfels.

This unit is predominantly a pyroxene hornfels with small irregular developments of a grossular garnet. No scheelite. 2.7 - 3.1 biotite hornfels dominant. 3.8 - 4.2 core very rubbly.

6.50 - 14.80 Marble.

Typical B lens sequence marble - i.e. dirty grey in colour, original bedding often defined by dark (probably carbonaceous rich) bands disrupted due to recrystallisation. No. scheelite.

14.80 - 23.30 Pyroxene hornfels / biotite hornfels.

A diffusively intermixed biotite hornfels and pyroxene hornfels which is spotted brown with minute flecks of biotite. These biotite blebs are often elongate in a particular direction.

Minor disseminated scheelite between 14.8 - 15.6
and 22.8 - 23.3
In these two zones a weak grossular garnet, pyroxene hornfels rich skarn, minor andradite is developed.

23.30 - 30.90 Marble.

Dirty grey and barren as above.

30.90 - 48.77 HANGINGWALL BIOTITE HORNFELS

A purplish brown, very fine grained, barren, biotite hornfels.

48.77 - 64.37 PYROXENE GARNET HORNFELS

Typical pgh. A pale green ph with irregular carbonate pods up to 7 cms diameter rimmed with grossular garnet.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/2

48.8 - 49.8 biotite hornfels rich. The pgh is almost completely barren except for a 3 cm scheelite vein at 61.80 metres.

64.37 - 71.42 GARNET SKARN

Low to medium grade scheelite in a typical medium grained andradite skarn. Condition of core is poor to moderate - split by many longitudinal fractures. Scheelite 64.7 - 72.7 metres.

71.42 - 72.70 MARBLE MARKER (?)

A weakly mineralised grey marble. No bedding apparent.

72.70 - 74.93 PYROXENE GARNET SKARN

A weakly banded barren pyroxene / andradite skarn. Bedding 74.8 m 60^{o} L.A.O.C.

74.93 - 83.24 BANDED BIOTITE PYROXENE HORNFELS

Thinly banded (<1 cm) brown (bh) and green (ph) hornfels. No mineralisation. Bedding 77.2 60^{o} L.A.O.C.
81.6 65^{o} L.A.O.C.

83.24 metres E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO: D 040/1

PLANNING

Proposer: M. J. Danielson — Depth: 75 metres

Location: Dolphin Mine
220040 drill cuddy.

Purpose of hole: Oreblocking

Co-ordinates: 220040 E 564105 N

Inclination: -65° — Target depth: 30 metres

Bearing: 360°Grid — °Magnetic

Target: - E - N

Approved by: M. C. Rogers — Date: 21.11.73

SURVEY

Survey Co-ords: - E - N

Survey bearing: 360ISG°Grid — °Magnetic

Surveyed in by: K.I.S. — Date: 20.11.73

Actual Co-ords: 220039.5 E 564105.9 N

R.L. of collar: -65.6 metres — Inclination of hole: -65°

Picked up by: M. Marchant — Date: 27.2.74

SUMMARY

Logged by: M. Danielson

Results: C lens. 12 - 16 at 2.37% WO_3.

DRILLING

Driller / Contractor: A.D.D.

Date commenced: 14.2.74 — Date terminated: 22.2.74

Casing:	Size :	HQ				
	Depth:	1.52				
Core:	Size :	NQ	BQ			
	Depth:	1.52	33.37			

Wedge Runoff:

Wedge placed: — Depth:

Proposed by: — Approved by:

Reason:

Extension: Nil — Final depth: 33.37 metres

Reason for termination: Passed north of No. 3 Fault into quartzites.

Condition of hole on completion:

Casing :

Cemented: No. Too much water.

Bore hole survey: Surveyed to 29.0 metres.

Water: 0-21.3 normal water pressure; 21.3-23.2 hole making water; 23.16-24.38 making 1 gall/min; 24.38-27.43 making 2 gall/min; 27.43-30.48 making 2½ gall/min; 30.48-33.37 making 3 gall/min;

~~Comments on drilling conditions:~~

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H. NO. D 040/1

Survey method : Multishot Camera
Final depth : 33.37 m
Casing depth : 1.52 m

Depth surveyed to : 29.0 m
Date surveyed : 22.2.74
Surveyed by : V. Powell
Checked by : M. J. Danielson

DEPTH	Bearing		Inclination		True Vertical depth	Co-oridinates	
	Grid	Mag.	Read	Corrected		E W	N
6.1		354°		-65°	5.53	0.41	4.21
9.1		353°		-65°	8.29	0.97	8.41
12.2		351°		-64°45'	11.05	1.64	12.63
15.2		350°		-64°15'	13.79	2.39	16.90
18.3		350°		-64°08'	16.49	3.15	21.19
21.3		349°30'		-64°	19.23	3.95	25.50
24.4		349°		-64°08'	21.92	4.78	29.78
27.4		348°30'		-64°23'	24.67	5.64	34.01
29.0		349°		-64°30'	26.05	6.05	36.12

REMARKS

GEOPEKO LIMITED - KING ISLAND

SUMMARY STRUCTURAL DATA

D.D.H. NO. D 040/1

Depth Interval (metres)	Rock Type	Fractures / Metre	Joint Angle	Joint Filling	Bedding Angle	% Core Recovery	Broken Core % >10cms (R.Q.D.)	Remarks (weathering)
0 - 5.0	bh/ph/ch	10					47	0 - 1.04 m 46% core recovery.
5.0 - 8.0	ch/ph							Core split
8.0 - 11.0	bh	13					56	
11.0 - 16.0	pgh/gh							Core split
16.0 - 18.95	bh/ph	8		17.5 - 18.95 chlorite	16m 55° 18m 40°		56	
E.O.H.								

FURTHER DATA & REMARKS (Compression Tests)

GEOPEKO LIMITED - DOLPHIN MINE

ASSAY DATA

D.D.H. NO. D 040/1

SAMPLE NO.	DEPTH (METRES) From	To	Length	Length recovered	ELEMENTS WO_3	Mo		check No	check WO_3	Assays Mo	COMMENTS
1570	4	5	1.0		<0.01	<0.01					
C 0867	5	6	"		0.75	0.03		C1753	0.75	0.01	
8	6	7	"		0.19	0.01					
9	7	8	"		2.18	0.15					
1465	8	9	"		<0.01	<0.01					
6	9	10	"		<0.01	<0.01					
7	10	11	"		<0.01	<0.01					
0870	11	12	"		0.22	0.12					
1	12	13	"		1.74	0.07		C1750	1.68	0.04	
2	13	14	"		5.10	0.18		Um/2.09			
3	14	15	"		2.10	0.09					
4	15	16	"		0.54	<0.01					
1571	16	17	"		0.01	<0.01					

SPECIFIC GRAVITY

Depth (m) :

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D 040/1

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.
C 0867	0.75	0.03	D 2191	0.76	0.02	C 1753	0.75	0.01	D 2198	0.79	0.02
C 0871	1.74	0.07	2190	1.90	0.06	1750	1.68	0.04	2232	1.90	0.06
C 0867	0.75	0.03	D 2122	0.82	0.02	D 2394	0.81	0.03			
C 0871	1.74	0.07	2123	1.92	0.07	2395	1.90	0.06			

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/1

0 - 1.75 BIOTITE HORNFELS

Grey brown biotite hornfels. 0 - 1.04 m there is 0.58 m core lost.

1.75 - 2.55 PYROXENE HORNFELS

A disrupted pyroxene hornfels with irregular patches of grossular garnet. Minor skarn developed but no mineralisation.

2.55 - 7.30 MARBLE

A dirty grey calcite hornfels. Bedding 6.5 m 55^{o} L.A.O.C.

Minor scheelite mineralisation from 5.33 - 6.10 m.

5.33 - 6.09, 0.2 m core loss.
6.1 - 6.2, rubble.

7.30 - 8.12 PYROXENE HORNFELS

7.30 - 7.77 good scheelite mineralisation.

8.12 - 11.30 HANGINGWALL BIOTITE HORNFELS

Purplish brown barren hornfels.

11.30 - 13.30 PYROXENE GARNET HORNFELS

Not a typical pgh but mainly a pyroxene hornfels with irregular patches of grossular hornfels. Generally massive with no obvious bedding except 13.0 - 13.3 m 50^{o} L.A.O.C. Minor disseminated scheelite. 12.75 - 13.30 m good scheelite.

13.30 - 16.0 BANDED GARNET PYROXENE HORNFELS

Andradite garnet skarn intermixed with some disrupted bedded pyroxene hornfels and grossular garnet. Moderate mineralisation throughout. 15.9 m bedding 50^{o} L.A.O.C.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. NO. D 040/1

16.0 - 18.57 BANDED BIOTITE HORNFELS / PYROXENE HORNFELS

Thinly banded (usually <1 cm) biotite hornfels pyroxene hornfels. Bedding 16.8 m 45° L.A.O.C.
17.5 m 40° L.A.O.C.

Minor grossular garnet hornfels developed 18.17 - 18.30 m.

18.57 - 33.37 QUARTZITE

Dirty grey heavily fractured. Extremely poor structural quality

33.37 metres E.O.H.