GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. B 325/21

PLANNING

PROPOSER: S.G. Brown DEPTH: 55 m

LOCATION: Main Decline

PURPOSE OF HOLE: To test "B" lens

PROPOSED CO-ORDS: 40310 E 10325 N

INCLINATION: +50°

BEARING: 270 °Grid °Mag

TARGET: E N

DEPTH:

CHECKED BY: S.G. Brown DATE: 21.8.83

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40313.6 E 10323.4 N

R.L. OF COLLAR: 869.4

INCLINATION OF HOLE:

PICKED UP BY: B.H. Lennon DATE: 8.9.83

SUMMARY

LOGGED BY: Not logged. All bh.

RESULTS: Abandoned at 7.0 m. Ground moved.

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:


DDH BH 325/20
0.00 — 16.48 M.


DDH BH 325/20
16.48 — 33.20M.


DDH BH 325/20
33.20 — 50.00 M
E.O.H.


DDH BH 325/19
0.00 — 16.78 M.


DDH BH 325/19
16.78 — 33.34 M.

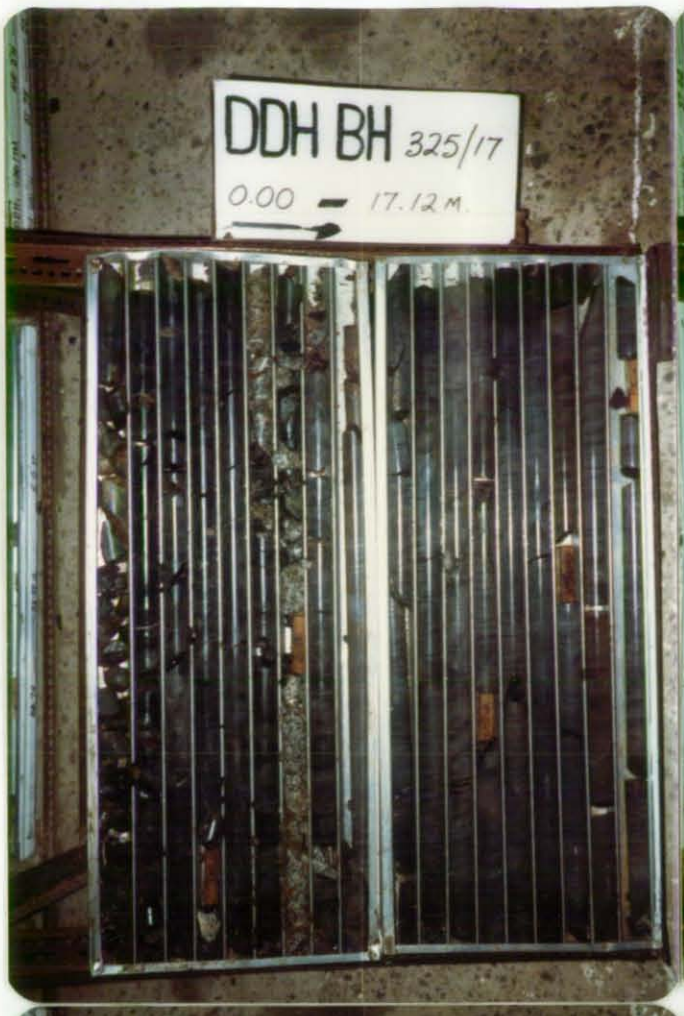

DDH BH 325/19
33.34 — 49.97M.


DDH BH 325/19
49.97 — 54.00M.
E.O.H.


DDH BH 325/18
0.00 — 16.50 M


DDH BH 325/18
16.50 — 33.27 M.


DDH BH 325/18
33.27 — 41.00 M.
E.O.H


DDH BH 325/17
0.00 — 17.12 M.


DDH BH 325/17
17.12 — 33.39 M.


DDH BH 325/17
33.39 — 49.45 M


DDH BH 325/17
49.45 — 58.00M
E.O.H.


DDH BH 325/15
0.00 — 16.64 M.


DDH BH 325/15
16.64 — 32.52 M


DDH BH 325/15
32.52 — 33.00 M
E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. B325/14 Bold Head Mine

PLANNING

PROPOSER: S.G. Brown DEPTH: 35 m

LOCATION: M37 Stope

PURPOSE OF HOLE: To test for ore in back of stope

PROPOSED CO-ORDS: 40 405 E 10 333 N

INCLINATION: +40°

BEARING: 180 °Grid °Mag

TARGET: E N

DEPTH: 30 m

CHECKED BY: S.G. Brown DATE: 25.10.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 180 °Grid °Mag

SURVEYED IN BY: B. Lennon DATE:

ACTUAL CO-ORDS: 40 405.6 E 10 332.05 N

R.L. OF COLLAR: 891.39

INCLINATION OF HOLE: +40°45'

PICKED UP BY: B. Lennon DATE: 16.11.82

SUMMARY

LOGGED BY: S.G. Brown

RESULTS: 29.5 - 31.5 m - 2 m at 1.13% WO3

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH:

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. B325/14 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 1.90	1.90	1.90	100
1.90 - 3.30	1.40	1.30	93
3.30 - 6.20	2.90	2.80	97
6.20 - 9.20	3.00	2.85	95
9.20 - 12.20	3.00	3.00	100
12.20 - 15.20	3.00	3.00	100
15.20 - 17.60	2.40	2.40	100
17.60 - 20.20	2.60	2.60	100
20.20 - 23.20	3.00	3.00	100
23.20 - 25.60	2.40	2.25	94
25.60 - 26.70	1.10	1.10	100
26.70 - 29.60	2.90	2.80	97
29.60 - 32.50	2.90	2.90	100
32.50 - 34.80	2.30	2.20	96
34.80 - 37.80	3.00	3.00	100
37.80 - 39.30	1.50	1.50	100
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. B325/14 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH8847	29.5	30.5	1.0	1.0	0.63			
8848	30.5	31.5	1.0	1.0	1.63			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. B 325/14 Bold Head

0.00 - 0.94 m — Basic Dyke (Sill)

Very fine grained grey green volcanics with noticeable development of white feldspar laths.

Initial contact appears to be conformable with bedding but later contact is at 90 degrees L.C.A.

0.94 - 23.34 m — Banded Footwall Beds

Initially the bedding is at a shallow angle to the long core axis which causes wide intersections of each unit to be recorded.

Bedding is at:

25 degrees L.C.A. at 1.10 m
37 degrees L.C.A. at 4.30 m
5 degrees L.C.A. at 5.30 m
30 degrees L.C.A. at 7.30 m
11 degrees L.C.A. at 11.3 m

Below about the 13 m mark the bedding becomes more regular:

58 degrees L.C.A. at 150 m
52 degrees L.C.A. at 19.6 m

From 0.94 to 3.70 m biotite hornfels dominate but below this position marble units dominate with minor biotite and pyroxene bands present throughout.

Mineralisation is present from 18.9 m to 21.4 m but only in trace amounts.

Minor fractures are present at 4.06 m and 6.65 m.

23.34 - 25.60 m — Marble

This unit could be a large marble band in the footwall beds but appears more massive and could be C1 Lens marble.

25.60 - 25.65 m — Fault

For 20 cm prior to this zone the marble has open water chambers present and the zone itself was

..../2

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. B 325/14 Bold Head

probably clay filled.

25.65 - 26.47 m Biotite Hornfels

Typical fine grained black biotite hornfels. Again possibly a wider band in the footwall beds.

26.47 - 31.66 m Marble

A massive grey white marble apparently C1 lens but not footwall beds. Bedding is at 30 degrees L.C.A. at 28.70 m.

Some of this unit is replaced to garnet skarn between 29.71 m to 30.10 m and 31.06 - 31.76 m - reasonable grade scheelite mineralisation is present here. Pyrrhotite is noted at 29.93 m.

31.66 - 32.97 m Podded Pyroxene Hornfels

A very fine grained green grey rock unit with large numbers of angular fragments apparent throughout.

32.97 - 39.30 m Podded Biotite Hornfels

A typical hanging wall C1 podded bh with a fine black purple groundmass and large numbers of irregular fragments both of carbonate and siliceous material present throughout. There are initially a considerable number of areas in which the groundmass is also silicified.

The unit is unmineralised.

E.O.H.


DDH BH 325/14
33.10 — 39.30m
E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 325/13 Bold Head

PLANNING

PROPOSER: S.G. Brown DEPTH: 40.0 m

LOCATION: M37 Stope

PURPOSE OF HOLE: To test for ore south of stope.

PROPOSED CO-ORDS: 40 405 E 10 333 N

INCLINATION: +1°

BEARING: 180 °Grid °Mag

TARGET: E N

DEPTH: 35 m

CHECKED BY: S.G. Brown DATE: 25.10.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 179 °Grid °Mag

SURVEYED IN BY: B. Lennon DATE:

ACTUAL CO-ORDS: 40 405.6 E 10 331.6 N

R.L. OF COLLAR: 890.86

INCLINATION OF HOLE: +1°10'

PICKED UP BY: B. Lennon DATE: 04.11.82

SUMMARY

LOGGED BY: S.G. Brown

RESULTS: 36.0 m - 38.0 m 2 m @ 0.63% W03

DRILLING

DATE COMMENCED: 26.10.82 DATE TERMINATED: 02.11.82

DRILLER/CONTRACTOR: K.I.S.

CASING: SIZE:
DEPTH: Nil

CORE: SIZE: 46TT
DEPTH: 41.0

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 41.0

REASON FOR TERMINATION: Past zone of interest.

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: No

BORE HOLE SURVEY: No

WATER: No

COMMENTS ON DRILLING CONDITIONS: Ok

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 325/13 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 2.65	2.65	2.65	100
2.65 - 5.50	2.85	2.80	98
5.50 - 8.40	2.90	2.60	90
8.40 - 11.40	3.00	3.00	100
11.40 - 14.40	3.00	3.40	113
14.40 - 17.40	3.00	2.75	92
17.40 - 19.90	2.50	2.50	100
19.90 - 22.50	2.60	2.60	100
22.50 - 24.90	2.40	2.40	100
24.90 - 27.40	2.50	2.50	100
27.40 - 30.40	3.00	3.00	100
30.40 - 33.20	2.80	2.50	89
33.20 - 36.40	3.20	1.70	53
36.40 - 39.40	3.00	3.00	100
39.40 - 41.00	1.60	0.80	50
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 325/13 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
8840	34.0	35.0	1.0	1.0	0.01			
8841	35.0	36.0	1.0	1.0	0.01			
8842	36.0	37.0	1.0	1.0	0.82			
8843	37.0	38.0	1.0	1.0	0.45			
8844	38.0	39.0	1.0	1.0	0.26			
8845	39.0	40.0	1.0	1.0	0.06			
8846	40.0	41.0	1.0	1.0	0.06			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. NO. 325/13 Bold Head

0.00 - 29.84 m Banded footwall beds

A sequence of banded footwall beds initially with the bedding almost parallel to the long core axis but becoming more oblique with depth.

Because of the shallow angle to core the bands, although narrow, extend over a fair length of core.

Bedding is at: 8°LCA at 2.0 m
25°LCA at 5.6 m
25°LCA at 9.0 m
8°LCA at 13.8 m
7°LCA at 19.7 m
53°LCA at 22.3 m
35°LCA at 28.6 m

The bedding is often very disturbed and shows distortion and podding in places.

Grossularite is present between 6.1 m and 7.5 m but no visible scheelite identified.

29.84 - 33.00 m Mineralised Banded Footwall Beds

The first two metres are well bedded at 35°LCA after which the material is more of a massive garnet skarn with only minor remnants of the bedding left in the core.

Although andradite garnet is well developed here the mineralisation appears to be very low and in fact, sub grade. The last 30 cm of core are very leached and broken.

33.00 m - 34.80 m Fault zone

Very poor recovery here, some clay and leached marble present.

34.80 - 35.98 m Marble

A leached impure marble with a very granular appearance. First impressions suggest that this is of the B Lens type rather than the C Lens type but this is by no means certain.

35.98 - 38.80 m Garnet skarn

An andradite rich garnet skarn with zones rich in pyroxene present throughout. No visible remnant bedding which suggests that it is not the replacement of a footwall bed. Again first impressions are of a B Lens type of material. Scheelite mineralisation is present throughout.

..../2

38.80 - 41.0 m Mineralised Marble

From 38.8 to 39.5 m this is a fairly competent unit with large amounts of grossularite and pyroxene present in the core.

Below 39.5 m the core is very broken and leached with ample evidence of the presence of water.

The scheelite content is low throughout.

E.O.H.


DDH BH 325/13
0.00 — 15.37 m.


DDH BH 325/13
15.37 — 32.00 m.


DDH BH 325/13
32.00 — 40.36 m.
E.O.H.

O.K to Copy

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/11

PLANNING

PROPOSER: C. Kendall DEPTH:

LOCATION: L37 Drill Cuddy

PURPOSE OF HOLE: Test B. Lens Hanging wall and aplite

PROPOSED CO-ORDS: 40 346 E 10 325 N

INCLINATION: +45°

BEARING: °Grid °Mag

TARGET: E N

DEPTH: 40m

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 267° 08' °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40 344.56 E 10 324.22 N

R.L. OF COLLAR: 887.83

INCLINATION OF HOLE: + 44°

PICKED UP BY: B. Lennon DATE: 14.3.82

SUMMARY

LOGGED BY: C. Kendall

RESULTS: 3.0 m @ 0.14%

DRILLING

DATE COMMENCED: DATE TERMINATED:

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 37.0 m

REASON FOR TERMINATION:

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. 325/11

Surveyed method:
Final depth:
Casing depth:

Depth surveyed to: 37
Date surveyed: 15.2.82
Surveyed by: R. Drake
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	E
37	269.00	N 61 E	44.15			10322.9	40318.0

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/11

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 8685	33	34			0.15			
86	34	35			0.12			
87	35	36			0.15			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/11

0.00 - 9.20 m MARBLE

A blotchy, podded sequence with colour ranging from white to red-brown. Numerous calcite veins at random angles to LCA.

Minor specks of scheelite visible throughout; sub - grade.

Small actinolite rich pods from 2.5 m to 4.1 m.
Zone of broken, weathered material from 6.0 to 6,2 m.

Joints: 40^{o} LCA
50^{o} LCA

Joints filled with calcite.

9.20 - 23.1 m MARBLE

Blue grey in colour showing no podding or inclusions.

No mineralisation.

19.3 - 23.1 m MARBLE

Zone shows some minor replacement with grossular garnet being formed. Scheelite present as fine specks but well below ore grade.

Unreplaced marble shows strong banding parallel to bedding with green (pyroxene?) material forming narrow (<5mm thick) bands.

23.1 - 33.1 m MARBLE

Marble with minor Skarn. A mineralised zone showing patchy replacement of marble.

Evidence of movement along joint at 34,0 m.

36.1 - 36.4 m APLITE

45^{o} LCA Sharp. Fine grain pink/white black speckled.

36.4 - 36.6 m Marble

36.6 - 37.0 m Aplite - Hole abandoned as cuddy collapsed.

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/11

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 4.10	4.10	3.30	80
4.10 - 7.10	3.00	3.00	100
7.10 - 10.10	3.00	3.00	100
10.10 - 13.10	3.00	3.00	100
13.10 - 16.10	3.00	3.00	100
16.10 - 19.10	3.00	2.90	97
19.10 - 20.20	1.10	1.25	114
20.20 - 23.10	2.90	2.80	97
23.10 - 26.10	3.00	2.85	95
26.10 - 29.10	3.00	3.00	100
29.10 - 32.10	3.00	2.90	97
32.10 - 35.10	3.00	3.00	100
35.10 - 37.00	1.90	1.80	95
E.O.H.			


DDH BH 325/11A
15.25 — 17.50 E.O.H m.


DDH BH 325/11A
0.00 — 15.25 m.


DDH BH 325/11
0.00 — 14.87 m.


DDH BH 325/11
14.87 — 28.72 m.


DDH BH 325/11
28.72 — 37.00 m.
E.O.H.


DDH BH 325/11
0.00 — 14.87m.


DDH BH 325/11
14.87 — 28.72m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 325/10 Bold Head

PLANNING

PROPOSER: C. Kendall DEPTH:

LOCATION: L37 Drill Cuddy

PURPOSE OF HOLE: Test CII South and D Lens South

PROPOSED CO-ORDS: 40 348 E 10 325 N

INCLINATION: -75°

BEARING: 090 °Grid °Mag

TARGET: E N

DEPTH: 85 m

CHECKED BY: S.G. Brown DATE: 01.03.82

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: °Grid °Mag

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40348.19 E 10324.10 N

R.L. OF COLLAR: 883.69

INCLINATION OF HOLE: -75°

PICKED UP BY: B. Lennon DATE: 11.3.82

SUMMARY

LOGGED BY: S.G. Brown

RESULTS: No ore grade mineralisation

DRILLING

DATE COMMENCED: 10.03.82 DATE TERMINATED: 14.03.82

DRILLER/CONTRACTOR: K.I.S.

CASING: SIZE: Nil
DEPTH:

CORE: SIZE: 46TT
DEPTH: 50.0

WEDGE PLACED: Nil DEPTH: PROPOSER:

EXTENSION: Nil

FINAL DEPTH: 50.0 m

REASON FOR TERMINATION: Unable to penetrate fault.

CONDITION OF HOLE ON COMPLETION:

CASING: Nil

CEMENTED: No

BORE HOLE SURVEY: No

WATER: No

COMMENTS ON DRILLING CONDITIONS: Ok except at end.

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. 325/10 Bold Head

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 2.70	2.70	2.60	96
2.70 - 4.40	1.70	1.70	100
4.40 - 5.80	1.40	1.40	100
5.80 - 8.10	2.30	2.30	100
8.10 - 11.10	3.00	2.85	95
11.10 - 12.70	1.60	1.60	100
12.70 - 15.10	2.40	2.35	98
15.10 - 16.80	1.70	1.70	100
16.80 - 18.60	1.80	1.70	94
18.60 - 19.70	1.10	1.10	100
19.70 - 21.80	2.10	2.00	95
21.80 - 24.50	2.70	2.70	100
24.50 - 27.50	3.00	3.00	100
27.50 - 27.90	0.40	1.00	250
27.90 - 30.80	2.90	2.20	76
30.80 - 33.80	3.00	3.00	100
33.80 - 36.80	3.00	3.00	100
36.80 - 39.20	2.40	2.15	90
39.20 - 41.90	2.70	2.70	100
41.90 - 44.90	3.00	3.00	100
44.90 - 47.90	3.00	3.00	100
47.90 - 50.00	2.10	1.60	76
E.O.H.			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. 325/10 Bold Head

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH8855	31.0	32.0	1.0	1.0	0.09			
8856	32.0	33.0	1.0	1.0	0.16			
8857	33.0	34.0	1.0	1.0	0.05			
8858	34.0	35.0	1.0	1.0	0.12			
E.O.H.								

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. 325/10 Bold Head

0.00 - 3.65 m	B Lens marble A dark grey black recrystallised marble with a considerable number of veins of remobilised calcite. The last 0.57 m of this unit are pyroxene rich.
3.65 - 28.55 m	Biotite hornfels Generally this unit is a massive fine grained black purple biotite hornfels although minor bedding at 53 degrees LCA is present in the first 2.5 metres. A small aplite is present between 9.75 and 10.35 m. The core becomes more blotchy in appearance towards the 28.55 m mark.
28.55 - 31.68 m	Podded biotite hornfels A disturbed unit with a groundmass dominantly of biotite hornfels and with well developed pods of calcite, garnet and pyrrhotite present throughout. The pods usually have pyroxene rich veins. There is a tendency to bedding in the last 50 cm at 57 degrees LCA and the pods become almost beds. The last 10 cm are grey green and shaley.
31.86 - 34.02 m	Garnet skarn A small unit of garnet pyroxene skarn with considerable amounts of remnant calcite present throughout. This section contains low grades of scheelite mineralisation.
34.02 - 46.26 m	Podded garnet pyroxene hornfels This unit is atypical of the pgh in that it is very light grey in colour rather than the normal green brown colour of pgh. Up to about the 40 m mark it could be described as a silicified podded biotite hornfels as remnant biotite rich areas do occur in the core. Numerous areas of leached and iron stained rock occur throughout. Bedding is apparent at 43.2 m at 62 degrees LCA.

..../2

A small fault almost parallel to LCA occurs at 44.7 m.

46.26 - 50.0 m

Marble

C Lens marble grey white in colour with a well developed recrystallised texture.

This unit is heavily weathered and maintained with portions of the core altered to clay.

The last 60 cm of this hole is represented by about 20 cm of recored fault material and the hole terminated in this fault pug.

Minor garnet is present in this unit but only trace mineralisation is present.

E.O.H.


DDH BH 325/10
0.00 — 14.00 M.


DDH BH 325/10
14.00 — 29.52 M


DDH BH 325/10
29.52 — 44.07 M


DDH BH 325/10
44.07 — 50.00 M
E.O.H.


DDH BH 325/10
44.07 – 50.00m.
E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/9

PLANNING

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

LOCATION: Q42 Drill Drive

PURPOSE OF HOLE: Define No. 2 Fault and Possible Mineralisation with Intersection of Marble)

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -18°

BEARING: 270° 30' °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 270° 30' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40383.9 E 10324.9 N

R.L. OF COLLAR: 952.5

INCLINATION OF HOLE: -17° 15'

PICKED UP BY: B. Lennon DATE: 10/8/79

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS: 13 - 16m, 3m @ 0.58% WO_3

DRILLING

DATE COMMENCED: 13/8/79 DATE TERMINATED: 15/8/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE: BQ
DEPTH: 38.6

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 38.6 m

REASON FOR TERMINATION: Passed Beyond Mineralised Zone.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY: Multishot

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/9

Surveyed method: Multishot
Final depth: 38.60 m
Casing depth: Nil

Depth surveyed to: 38.60 m
Date surveyed: 15/8/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		S	W
7	270°	298°	72°	-18°	2.16	0	6.66
19	269°	297°	72° 30'	-17° 30'	5.77	.20	18.10
28	269°	297°	72° 15'	-17° 45'	8.51	.35	26.67
38.60	268°	296°	72°	-18°	11.79	.70	36.74

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/9

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.8	2.8	2.8	100
2.8 - 5.8	3.0	3.0	100
5.8 - 8.8	3.0	3.0	100
8.8 - 9.8	1.0	1.0	100
9.8 - 10.5	0.7	0.7	100
10.5 - 13.3	2.8	2.8	100
13.3 - 16.0	2.7	2.7	100
16.0 - 19.0	3.0	3.0	100
19.0 - 20.7	1.7	1.7	100
20.7 - 23.7	3.0	3.0	100
23.7 - 26.7	3.0	3.0	100
26.7 - 27.5	0.8	0.8	100
27.5 - 30.5	3.0	3.0	100
30.5 - 33.2	2.7	1.9	70
33.2 - 34.5	1.3	1.3	100
34.5 - 35.5	1.0	1.0	100
35.5 - 36.5	1.0	1.0	100
36.5 - 37.1	0.6	0.5	83
37.1 - 38.4	1.3	1.3	100
38.4 - 38.6	0.2	0.2	100
EOH 38.6 m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/9

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7590	7	8	1.0	1.0	<0.01	0.01		
91	8	9	"	"	<0.01	0.01		
92	9	10	"	"	0.61	0.02		
93	10	11	"	"	<0.01	0.01		
94	11	12	"	"	0.10	0.01		
95	12	13	"	"	0.13	0.01		
96	13	14	"	"	0.46	0.02		
97	14	15	"	"	0.70	0.04		
98	15	16	"	"	0.58	0.03		
99	16	17	"	"	<0.01	0.01		
7600	17	18	"	"	<0.01	0.01		
7251	21	22	"	"	<0.01	0.01		
52	22	23	"	"	<0.01	0.01		
53	23	24	"	"	0.05	0.01		
54	24	25	"	"	<0.01	0.01		
55	25	26	"	"	<0.01	0.01		
56	26	27	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/9

0.0 - 9.23 m CALC HORNFELS

This unit is a pale grey marble of fine to medium grain size. Bedding is well developed over most of the unit.

eg. 26° to LCA @ 6.9 m

No mineralisation is present. Minor faults occur at:

2m	2 cm wide clay zone.
3.2 m	Open (3 mm) joints lined with calcite.
4.5 m	2 cm zone of clay.
6.15 - 6.3	Zone of clay, powdered rock and rock fragments.
6.5 - 6.8	Crushed and powdered rock.

A major fault occurs from 8.4 - 9.0 m This area is extensively brecciated and fractured. It is ironstained, and swelling clays are present.

9.23 - 15.3 GARNET HORNFELS

This unit is khaki brown in colour, and has a medium grain size. Mineralisation is present, but is concentrated between 9.3 - 10 m, 11.2 - 114. m, and 12.5 - 13 m.

In these areas the grade is about 1% in the remainder about 0.1%.

Bedding is 30° to LCA @ 12.1 m.

A large joint at 13.1 m is 11° to LCA.

15.3 - 31.8 CALC HORNFELS

This unit is similar to the first marble unit. It is pale grey and has a fine-medium grain size. Bedding is well developed

eg. 16° to LCA @ 18.7 m
36° to LCA @ 26.6 m

Some poor mineralisation is present in the first 1 m and from 23.1 - 24.8 m The second group is associated with a fault from 23.1 - 23.6m. This area is fractured and brecciated and contains swelling clays.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/9

31.8 - 38.6 m BIOTITE HORNFELS/FAULT ZONE

This region of core is extremely broken up and very few pieces of core are over 10 cm long (about 5). Most of the core consists of loose rubble 1.0 - 3.0 cm wide. There is extensive lose of core. The lithology is biotite hornfels. A black, fine grained, massive rock.

The driller reported a 1 m cavity from about 32 - 33 m.

This area is thought to be the No. 2 fault. There is no mineralisation

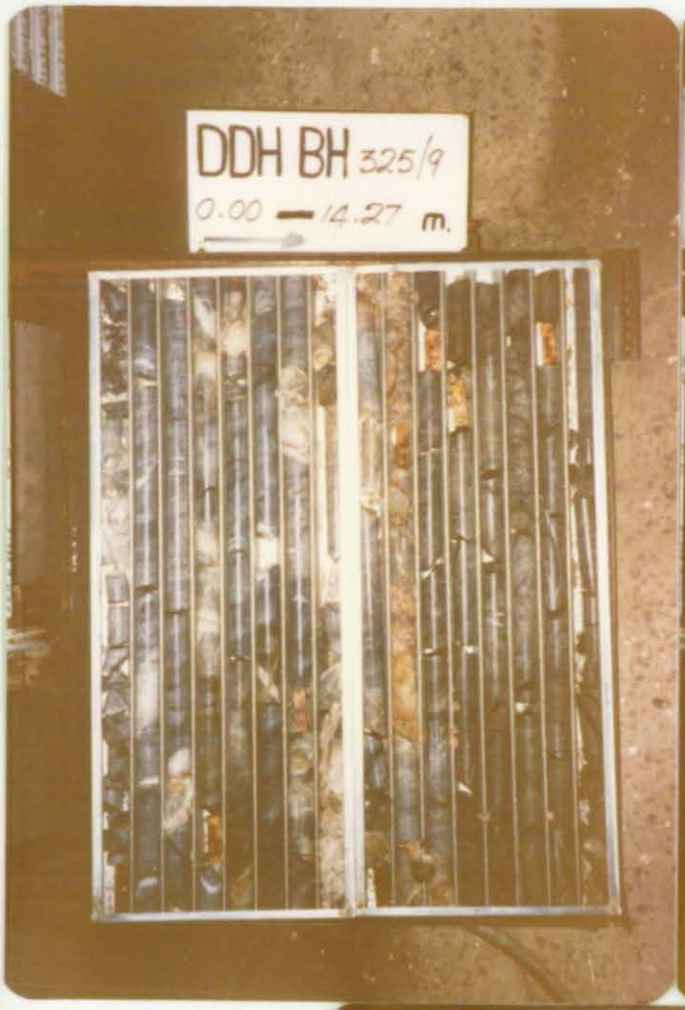
EOH 38.6 m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 325/9

LAB. K.I.S.			LAB. K.I.S. CHECK			LAB. AMDEL			LAB. ALS			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
7592	0.61	0.02	8339	0.78	<0.01	8340	0.800		8341	0.71		
7598	0.58	0.03	8342	0.83	<0.01	8343	0.640		8344	0.62		


DDH BH 325/9
0.00 — 14.27 m.


DDH BH 325/9
14.27 — 28.64 m.


DDH BH 325/9
28.64 — 38.60 m.
E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/8

PLANNING

PROPOSER: R. E. Sandell-Davies DEPTH: 30m

LOCATION: Q42 Drill Drivee

PURPOSE OF HOLE: To Locate Boundary Fault and Possible Mineralisation

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -20^{o}

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

TARGET: E N

DEPTH:

CHECKED BY: G.J.B DATE: 1/8/79

SURVEY

SURVEY CO-ORDS: E N

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

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40388.5 E 10325.4 N

R.L. OF COLLAR: 951.9

INCLINATION OF HOLE: -20^{o} 43'

PICKED UP BY: B. Lennon DATE: 8/879

SUMMARY

LOGGED BY: R. E. Sandell-Davies

RESULTS: Not Assayed
No Mineralisation Encountered

DRILLING

DATE COMMENCED: 3/8/79 DATE TERMINATED: 8/8/79

DRILLER/CONTRACTOR:

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 21.7m

REASON FOR TERMINATION: Passed through Boundary Fault

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/8

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.4	2.4	2.4	100
2.4 - 5.8	3.4	3.4	100
5.8 - 6.9	1.1	1.1	100
6.9 - 8.0	1.1	1.1	100
8.0 - 9.5	1.5	1.5	100
9.5 - 11.2	1.7	1.7	100
11.2 - 12.2	1.0	1.0	100
12.2 - 14.2	2.0	2.0	100
14.2 - 14.9	0.7	0.7	100
14.9 - 15.8	0.9	0.9	100
15.8 - 16.2.	0.4	0.4	100
16.2 - 17.0	0.8	0.8	100
17.0 - 17.4	0.4	0.4	100
17.4 - 19.0	1.6	1.6	100
19.0 - 19.8	0.8	0.5	63
19.8 - 21.0	1.2	1.1	92
21.0 - 21.7	0.7	0.7	100
EOH 21.7m			

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/8

0.0 - 1.93m **BIOTITE HORNFELS**

This unit has a fine grained matrix but a clastic texture, its colour is predominantly purplish. Bedding is not present and the unit is often disturbed. It is not mineralised.

1.93 - 8.7 **INTERBEDDED BIOTITE/PYROXENE HORNFELS**

This is a distinctive unit consisting mostly of dark fine grained biotite hornfels. Occuring within are this (1cm) interbeds of "stringy" and somtimes discontinuous pyroxene hornfels.

Bedding is 54° to LCA at 4.26m

The contacts are not smooth, generally having a crinkly appearance. At around 5.2m, the density of pyroxene hornfels increases and bands of grossular garnet are present. These two units, forming the whole core for about 60cm.

Loose and broken core occurs at 5.4m, 2.9m and 6.9m.

Fine grained pink aplite occurs from 5.5 - 6.8m and 6.9 - 8.7m.

8.7 - 18.4 **BIOTITE HORNFELS**

Fine grained, dark grey biotite hornfels occur throughout this section. In places bedding is evident, but it is generally massive.

Bedding is at 40° to LCA @ 10.3m

Sulphides are often present on joint surfaces. Loose and broken core with chlorite slickenslides occurs at 11.3 - 12m @ 14.9m, 15.2m, 15.8 - 16.2m, 16.95 - 17.5m.

The unit is unmineralised.

18.4 -- 19.4 **FAULT ZONE**

This area is composed of altered and fractured biotite hornfels/ quartzites. Green pyroxene replacement is evident.

Most of the core is loose, broken rubble <2cm and show chlorite slickenslides.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/8

19.4 -- 21.7 QUARTZITES

A pale to dark grey, fine grained rock. It is massive and displays no structures or any mineralisation.

Small flicks of pyrite are visible in internal small fractures.

EOH 21.7m


DDH BH 325/8
0.00 — 12.90 m.


DDH BH 325/8
12.90 — 21.70 m.
E.O.H.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/7

PLANNING

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

LOCATION: Q42 Drill Drive

PURPOSE OF HOLE: To define A Lens

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: +40°

BEARING: 270 °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: S. G. Brown — DATE: 10/7/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 271° 04' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40384.4 E 10325.0 N

R.L. OF COLLAR: 955.75

INCLINATION OF HOLE: +41°

PICKED UP BY: B. Lennon — DATE: 8/8/79

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: No Economic Mineralisation

DRILLING

DATE COMMENCED: 1/8/79 — DATE TERMINATED: 3/8/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 27m

REASON FOR TERMINATION: Passed through Mineralisation in A Lens

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. BH 325/7

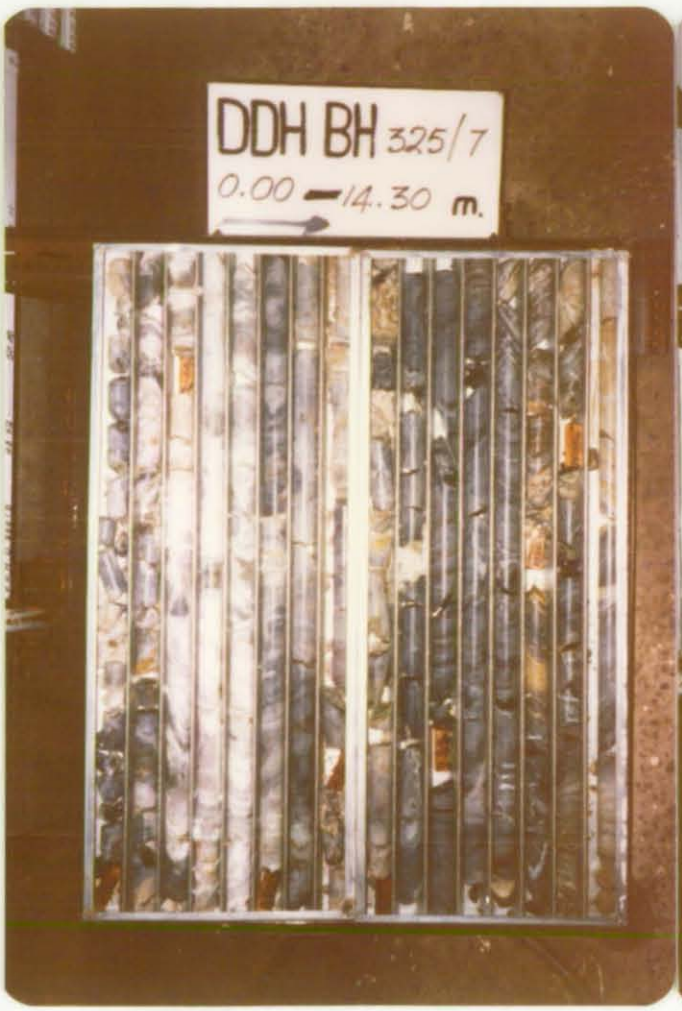
INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.6	2.6	2.6	100
2.6 - 4.6	2.0	2.0	100
4.6 - 6.6	2.0	2.0	100
6.6 - 9.2	2.6	2.6	100
9.2 - 12.2	3.0	3.0	100
12.2 - 13.3	1.1	1.0	92
13.3 - 16.3	3.0	3.0	100
16.3 - 17.7	1.4	1.3	93
17.7 - 20.7	3.0	3.0	100
20.7 - 25.7	5.0	5.0	100
25.7 - 27.0	1.3	1.3	100
EOH 27.0m			

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 325/7

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
7852	0.32	-	8384	0.39	0.02	8385	0.330		8386	0.23		


DDH BH 325/7
0.00 — 14.30 m.


DDH BH 325/7
14.30 — 27.00 m.
E.O.H

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/6

PLANNING

PROPOSER: R. E. S. Davies DEPTH: 140

LOCATION: Q42 Drill Drive

PURPOSE OF HOLE: Ore Blocking Fault Block

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -58°

BEARING: 270° °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: G. J. B. DATE: 12/7/79

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 270° 41' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40385.8 E 10325.07 N

R.L. OF COLLAR: 951.66

INCLINATION OF HOLE: -56°

PICKED UP BY: B. Lennon DATE: 16/7/79

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: 135-140m, 5m @ 1.64% WO_3

DRILLING

DATE COMMENCED: 12/7/79 DATE TERMINATED: 30/7/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 156.7m

REASON FOR TERMINATION: Hit Granite

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/6

Surveyed method: Multishot
Final depth: 156.7
Casing depth: 1.0m

Depth surveyed to: 156.7
Date surveyed: 30/7/79
Surveyed by: L. Denby
Checked by: R. E. S. Davies

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
16	272°	244°	33	-57	13.42	0.3	8.7
25	273°	245°	33	-57	20.97	0.56	13.59
37	272°	244°	33	-57	31.03	0.79	20.13
49	273°	245°	33	-57	41.09	1.13	26.66
61	273°	245°	33	-57	51.15	1.47	33.19
73	273°	245°	33	-57	61.21	1.81	39.72
79	273°	245°	33	-57	66.24	1.98	42.99
97	273°	245°	32	-58	81.50	2.48	52.52
106	273°	245°	32	-58	89.13	2.73	57.28
124	273°	245°	32	-58	104.39	3.23	66.81
142	274°	246°	32	-58	119.65	3.9	76.33
156.7	274°	246°	32	-58	132.12	4.44	84.1

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.2	3.2	3.2	100
3.2 - 6.0	2.8	2.8	100
6.0 - 7.8	1.8	1.8	100
7.8 - 8.3	0.5	0.5	100
8.3 - 9.0	0.7	0.7	100
9.0 - 12.0	3.0	3.0	100
12.0 - 13.1	1.1	1.1	100
13.1 - 13.9	0.8	0.8	100
13.9 - 14.6	0.7	0.7	100
14.6 - 17.6	3.0	3.0	100
17.6 - 18.6	1.0	1.0	100
18.6 - 19.5	0.9	0.9	100
19.5 - 21.1	1.6	0.9	100
21.1 - 21.7	0.6	0.6	100
21.7 - 22.2	0.5	0.5	100
22.2 - 23.2	1.1	1.0	100
23.2 - 25.7	2.4	0.8	100
25.7 - 26.9	1.2	1.2	100
26.9 - 27.5	0.6	0.6	100
27.5 - 27.9	0.4	0.4	100
27.9 - 28.8	0.9	0.9	100
28.8 - 29.2	0.4	0.3	75
29.2 - 30.7	1.5	1.5	100
30.7 - 32.5	1.8	1.8	100
32.5 - 34.4	1.9	1.9	100
34.4 - 36.1	1.7	1.7	100
36.1 - 36.3	0.2	0.2	100
36.3 - 37.1	0.8	0.8	100
37.1 - 37.6	0.5	0.5	100
37.6 - 38.2	0.6	0.6	100
38.2 - 39.1	0.9	0.9	100
39.1 - 39.5	0.4	0.4	100
39.5 - 40.2	0.7	0.7	100
40.2 - 41.4	1.2	1.2	100
41.4 - 43.5	2.1	2.1	100
43.5 - 45.4	1.9	1.9	100
45.4 - 46.6	1.2	1.2	100
46.6 - 47.0	0.4	0.3	100
47.0 - 47.6	0.6	0.6	100
47.6 - 49.6	2.0	2.0	100
49.6 - 49.7	0.3	0.2	100
49.7 - 52.1	2.4	2.4	100
52.1 - 54.8	2.7	2.7	100
54.8 - 57.8	3.0	3.0	100
57.8 - 60.9	3.0	3.0	100
60.9 - 63.5	2.7	2.7	100
63.5 - 66.5	3.0	3.0	100
66.5 - 69.3	2.8	2.8	100
69.3 - 72.3	3.0	3.0	100
72.3 - 75.3	3.0	3.0	100
75.3 - 78.1	2.8	2.8	100
78.1 - 81.0	1.9	1.9	100
81.0 - 81.8	0.8	0.8	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/6

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
81.8 - 82.9	1.1	1.1	100
82.9 - 85.8	2.9	2.9	100
85.8 - 88.8	3.0	3.0	100
88.8 - 91.8	3.0	3.0	100
91.8 - 92.5	0.7	0.7	100
92.5 - 94.6	2.1	2.1	100
94.6 - 97.6	3.0	3.0	100
97.6 - 99.6	2.0	2.0	100
99.6 - 101.0	1.4	1.4	100
101.0 - 102.9	1.9	1.9	100
102.9 - 104.7	1.8	1.8	100
104.7 - 107.2	2.5	2.5	100
107.2 - 108.3	1.1	1.1	100
108.3 - 110.0	1.7	1.7	100
110.0 - 110.8	0.8	0.8	100
110.8 - 111.6	0.8	0.8	100
111.6 - 112.20	0.6	0.6	100
112.2 - 115.2	3.0	3.0	100
115.2 - 118.2	3.0	3.0	100
118.2 - 121.2	3.0	3.0	100
121.2 - 124.2	3.0	3.0	100
124.2 - 127.2	3.0	3.0	100
127.2 - 130.2	3.0	3.0	100
130.2 - 133.2	3.0	3.0	100
133.2 - 136.2	3.0	3.0	100
136.2 - 139.2	3.0	3.0	100
139.2 - 142.2	3.0	3.0	100
142.2 - 145.2	3.0	3.0	100
145.2 - 146.2	1.0	1.0	100
146.2 - 146.9	0.7	0.7	100
146.9 - 149.6	2.7	2.7	100
149.6 - 152.6	3.0	3.0	100
152.6 - 154.2	1.6	1.6	100
154.2 - 154.9	0.7	0.5	100
154.9 - 156.7	1.8	1.8	100
EOH 156.7m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/6

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 7174	0	1	1.0	1.0	<0.01	0.01		
75	1	2	"	"	0.01	0.01		
76	2	3	"	"	0.06	0.01		
77	3	4	"	"	<0.01	0.01		
78	4	5	"	"	<0.01	0.01		
79	10	11	"	"	0.02	0.02		
80	11	12	"	"	<0.01	0.02		
81	12	13	"	"	0.02	0.02		
84	18	19	"	"	-	-		
85	19	20	"	"	0.02	0.02		
86	20	21	"	"	0.14	0.02		
87	21	22	"	"	0.01	0.01		
88	22	23	"	"	0.05	0.03		
89	23	24	"	"	0.66	0.03		
90	24	25	"	"	0.07	0.01		
91	25	26	"	"	0.01	0.01		
92	26	27	"	"	0.02	0.02		
93	27	28	"	"	0.01	0.01		
94	49	50	"	"	0.04	0.02		
95	50	51	"	"	0.20	0.02		
96	51	52	"	"	0.98	0.04		
97	52	53	"	"	0.25	0.01		
98	53	54	"	"	0.01	0.01		
99	54	55	"	"	0.01	0.01		
7200	55	56	"	"	0.01	0.01		
7701	56	57	"	"	0.01	0.01		
2	57	58	"	"	0.02	0.01		
3	58	59	"	"	0.08	0.01		
4	59	60	"	"	0.01	0.01		
5	60	61	"	"	0.01	0.01		
6	61	62	"	"	0.03	0.01		
7	62	63	"	"	0.01	0.01		
8	63	64	"	"	0.01	0.01		
9	64	65	"	"	0.01	0.01		
10	65	66	"	"	0.01	0.01		
11	66	67	"	"	0.05	0.02		
12	67	68	"	"	0.59	0.02		
13	68	69	"	"	0.26	0.02		
14	69	70	"	"	0.01	0.01		
15	70	71	"	"	0.01	0.01		
16	71	72	"	"	0.01	0.01		
17	72	73	"	"	0.01	0.01		
18	73	74	"	"	0.01	0.02		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/6

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
D 7731	113	114	1.0	1.0	0.01	0.02		
32	114	115	"	"	0.01	0.01		
33	115	116	"	"	0.02	0.01		
34	116	117	"	"	0.23	0.01		
35	117	118	"	"	0.32	0.01		
36	118	119	"	"	0.12	0.01		
37	119	120	"	"	0.01	0.01		
38	120	121	"	"	0.01	0.02		
39	121	122	"	"	0.02	0.01		
40	122	123	"	"	0.01	0.01		
41	123	124	"	"	0.03	0.01		
42	124	125	"	"	0.01	0.01		
43	125	126	"	"	0.07	0.01		
44	126	127	"	"	0.09	0.01		
45	127	128	"	"	0.03	0.01		
46	128	129	"	"	0.72	0.03		
47	129	130	"	"	0.07	0.01		
48	130	131	"	"	0.08	0.01		
49	131	132	"	"	0.18	0.08		
50	132	133	"	"	0.01	0.01		
51	133	134	"	"	0.01	0.01		
52	134	135	"	"	0.20	0.02		
53	135	136	"	"	0.78	0.02		
54	136	137	"	"	3.78	0.09		
55	137	138	"	"	2.20	0.06		
56	138	139	"	"	1.15	0.02		
57	139	140	"	"	0.30	0.01		
58	140	141	"	"	0.01	0.01		
59	141	142	"	"	0.01	0.01		
60	142	143	"	"	0.01	0.01		
61	143	144	"	"	0.55	0.01		
62	144	145	"	"	0.01	0.01		
63	145	146	"	"	0.02	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/6

0.0 - 6.2m PYROXENE HORNFELS

This unit is a green fine grained rock. Commonly disturbed and with some areas of orange grossular garnet.

Mineralisation is present in the first 3m (about 0.3% WO_3). Some calcite veining present.

6.2 - 19.1 BANDED PYROXENE/BIOTITE HORNFELS

This unit is a mixture mostly of biotite hornfels and pyroxene hornfels. The biotite hornfels often has a purplish colour.

The upper most 2m are quite disturbed, but bedding is well developed in the central section and is also present at the base.

Mineralisation is present as a thin vein at 11.6m. From 8.5 - 9.7m is an aplite dyke.

Bedding 35^{o} to LCA @ 10.6m

19.1 - 25.7 FAULT ZONE

Extensive fracturing of the rock, much loose material, development of clays and loss of core indicate a major fault.

The area is mineralised at about 0.5% WO_3.

The rock type is biotite hornfels/marble/garnet hornfels.

25.7 - 29.2 BIOTITE HORNFELS

This rock is a black fine grained mudstone which has interbeds and disturbed pods of pyroxene and garnet hornfels.

There is no mineralisation. A thin aplite is present from 27.9 - 28.6m.

29.2 - 37.86 APLITE DYKE

This dyke is a thick, competent body. It is medium grained and has an overal pink appearance.

37.86 - 48.15 BIOTITE HORNFELS

A mainly light grey fine grained rock. There are few interbands. Aplite stringers @ 39.2 - 39.3 and 39.5 - 39.9. Pyroxene hornfels and garnet hornfels are present as thin bands at the base.

There is no mineralisation. Loose and broken rock is associated with the aplite and also occurs at 40.8 - 41.4, and about 50% of the core between 45[illegible] and 47.8 is rubble. Some of the large pieces have cavaties.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/6

48.15 - 52.92m GARNET HORNFELS

This area mineralised to about 0.7% WO_3 (eye estimate). It consists of medium grained brown andradite skarn with minor light grey fine grained biotite hornfels.

From 49.6 - 51m about 70% of the core is rubble.

Bedding 41° to CLA @ 52.65m

52.92 - 79.59 CALC HORNFELS

This unit consists mostly of light grey, medium grained, well bedded marble.

It is cut by a number of faults which have either altered it to pyroxene hornfels and clay or brecciated them and resealed the marble with the addition of red iron oxide. All theses dislocations are mineralised, but the main body of marble is not.

57.95 - 59.05m	Soft pyroxene hornfels with expanding clays, green, some garnet hornfels (andradite and grossular) with ore.
60.3 - 62m	Pyroxene hornfels with garnet hornfels in fractured and broken area, good mineralisation.
62.3 - 62.6	Green pyroxene hornfels with clay.
63.0 - 64.6	Area of moderate fracturing, mostly marble with some pale green alteration.
65.5 - 68.63	Much green pyroxene and clay, Talc material, garnet hornfels with mineralisation present. Some minor grossular.
69.5 --70.0	Rehealed brecciated iron stained zone with good mineralisation
70.6 - 70.8	As above
71.14 --71.5	As above

Most of the remainder of the unit is as described for the reddened resealed breccia. Major faults at 74m indicated by loose and swelling clays 73.9 - 74m. Loose rubble and clay 71 - 71.2 indicates another fault.

The base of the marble is very disturbed.

79.59 - 112.23 BIOTITE HORNFELS

Typical biotite hornfels, fine grained, colour varying from black - dark grey to rare light grey. Bedding is usually present.

Aplite dyke from 85.8 - 86.32. Swelling clays and fractured and altered rock at 79.9 - 80.84m indicates a significant fault.

99.6 - 99.9m is entirely brown mud and probably a fault. Rehealed breccias at 101.3 and 102.12m

108.1 - 108.3 Consists of fine rubble and some clay.

This unit is not mineralised.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/76

112.18 - 112.57m BIOTITE HORNFELS

This is a continuation of the last unit and is mostly broken.

112.57 - 133.6 BANDED PYROXENE HORNFELS/BIOTITE HORNFELS/GARNET HORNFELS

This large unit is best subdivided for accurate description.

112.57 - 115.36m Pyroxene garnet hornfels. This unmineralised unit has the charactistic calcite/grossularite pods (20cm wide) set in a matrix of mostly biotite hornfels which is well bedded in places.
Bedding 38^{o} to LCA @ 115m

115.36 - 118.25 Garnet hornfels. A grey - brown coarse grained andradite skarn which is irregularly mineralised.

118.25 - 121.76 Banded pyroxene hornfels/biotite hornfels/garnet hornfels. This unit is similar to that previously logged but is dominantly pyroxene hornfels. Scheelite is rarely present.
Bedding 53^{o} to LCA @ 121.5m

121.76 - 133.6 Garnet/pyroxene hornfels. This unit consists dominantly of brown medium grained andradite skarn, interbanded with considerable pyroxene hornfels. A podded texture is sometimes evident with calcite cores.
Mineralisation is irregular probably averaging 0.5%.
This ore bearing horizon would seem to be C_1.

133.62 - 134.8 PYROXENE GARNET HORNFELS

A pale green, occassionally podded unit with little mineralisation assocated with the brown andradite garnet.

134.8 - 139.55 GARNET HORNFELS

A massive unit which has a coarse grained upper section to 137.7 and a finer grained lower part.

The mineralisation is distributed accordingly, being very coarse but irregular in the upper half. In the lower half it is very finely disseminated throughout and is probably 1% WO_3.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/6

139.55 - 153.03 BANDED FOOTWALL BEDS

This unit is a well bedded series of pyroxene hornfels/biotite hornfels/marble/garnet hornfels and is best subdivided.

139.55 - 141.65m	This is fine grained interbanded biotite hornfels/pyroxene hornfels and is unmineralised.
141.65 - 142.15	This section is roughly 60% marble interbedded with pyroxene and biotite hornfels.
142.15 - 143.25	Fine grained well bedded biotite hornfels with some minor pyroxene hornfels.
143.25 - 144.5	Brown medium grained andradite garnet hornfels well mineralised. Short bands of marble of the base.
144.5 - 153.03	Pyroxene/biotite hornfels well interbedded and unmineralised. It is disturbed at 145.46 and 145.67 - 146m

Bedding	is	45^{o}	@ 139.75m
		50^{o}	141.6
		53^{o}	146.5
		63^{o}	148.3
		31^{o}	152.4

153.03 - 156.7 GRANITE

Coarse grained pink granite with large orthoclase crystals. Much core lost and what was recovered is broken, crushed and rubbly.

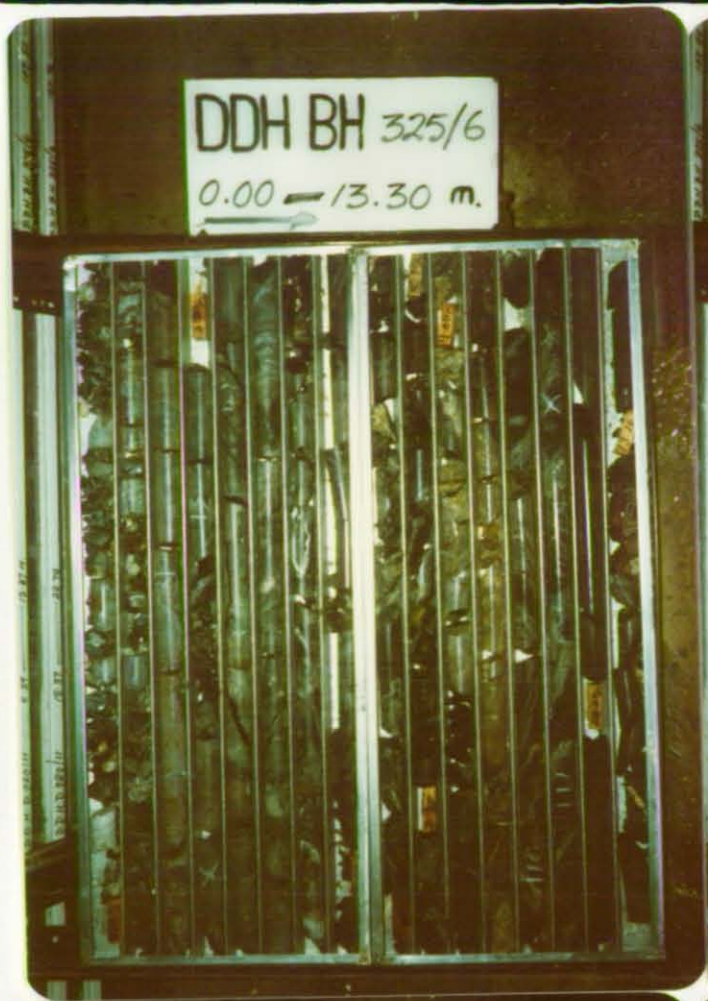
EOH 156.7m

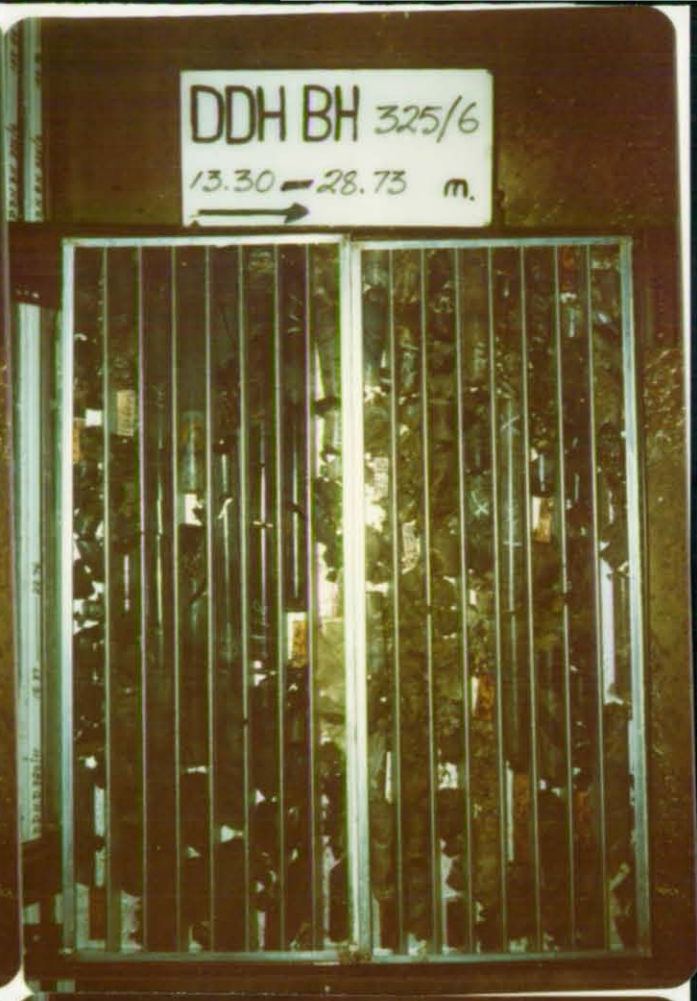
GEOLOGY - KING ISLAND SCHEELITE

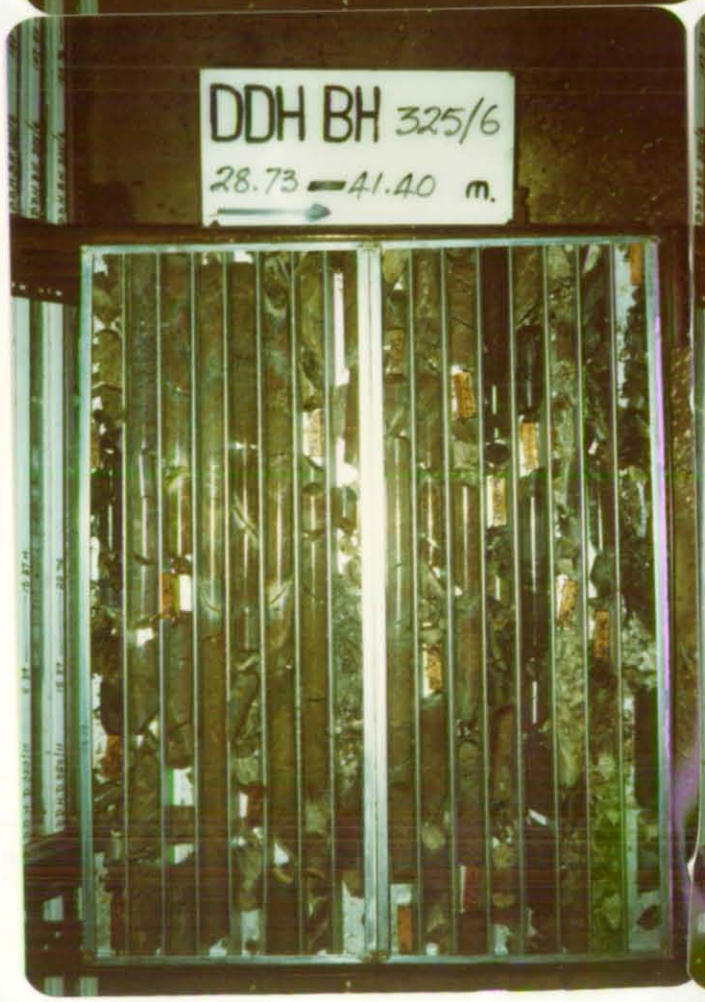
CHECK ASSAY DATA

D.D.H. No. BH 325/6

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
7186	0.14	0.02	8294	0.19	<0.01	8295	0.180		8296	0.20		
7195	0.20	0.02	8297			8298	0.235		8299	0.23		
7755	2.20	0.06	8300	1.70	<0.01	8301	1.60		8302	1.63		
7761	0.55	0.01	8303	0.56	<0.01	8304	0.590		8305	0.53		


DDH BH 325/6
0.00 — 13.30 m.


DDH BH 325/6
13.30 — 28.73 m.

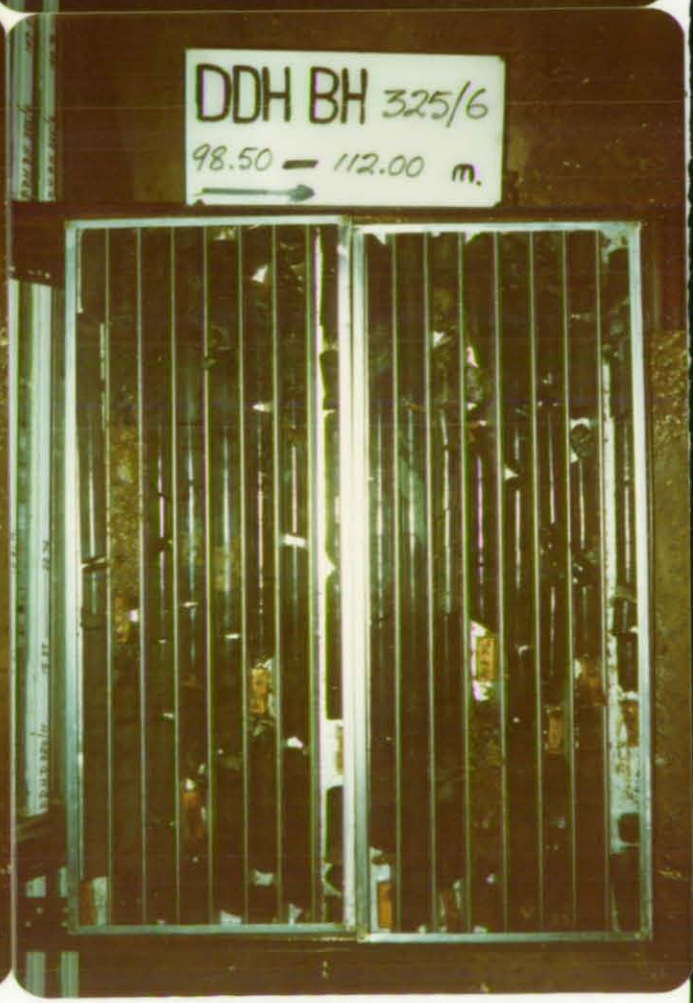

DDH BH 325/6
28.73 — 41.40 m.


DDH BH 325/6
41.40 — 54.88 m.

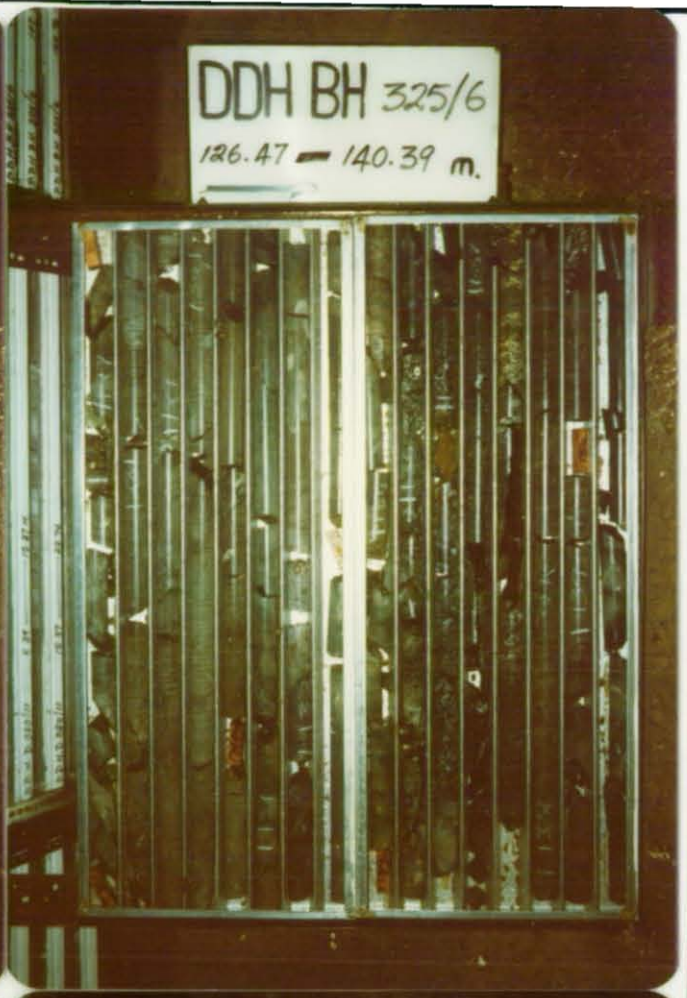

DDH BH 325/6
54.88 — 69.43 m.


DDH BH 325/6
69.43 — 83.60 m.


DDH BH 325/6
83.60 — 98.50 m.


DDH BH 325/6
98.50 — 112.00 m.


DDH BH 325/6
112.00 — 126.47 m.


DDH BH 325/6
126.47 — 140.39 m.


DDH BH 325/6
140.39 — 154.76 m.


DDH BH 325/6
154.76 — 156.70 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/5

PLANNING

PROPOSER: J. M. Clark DEPTH: 145m

LOCATION: Q42 Drill Drive

PURPOSE OF HOLE: Ore Blocking fault Block

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -70°

BEARING: 270 $^{\circ}$GRID $^{\circ}$MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 269° 41' $^{\circ}$GRID $^{\circ}$MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40386.2 E 10325.1 N

R.L. OF COLLAR: 951.6

INCLINATION OF HOLE: -69° 11'

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

SUMMARY

LOGGED BY: R. E. Sandell Davies

RESULTS: 56-62m, 6m @ 0.79% WO_3

DRILLING

DATE COMMENCED: 21/6/79 DATE TERMINATED: 12/7/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 144m

REASON FOR TERMINATION: Finished in Granite.

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/5

Surveyed method: Multishot
Final depth: 144.0m
Casing depth: 1m

Depth surveyed to: 144.0m
Date surveyed: 12/7/79
Surveyed by: L. Denby
Checked by:

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	W
7	268°	240°	21°	-69°	6.54	.09	2.51
25	272°	244°	21°	-69°	23.34	.32	8.96
37	272°	244°	21°	-69°	34.54	.47	13.26
43	273°	245°	21° 15'	-68° 45'	40.13	.58	15.43
52	273°	245°	21° 15'	-68° 45'	48.52	.75	18.69
61	274°	246°	21°	-69°	56.92	.98	21.91
67	273°	245°	21°	-69°	62.52	1.09	24.16
79	275°	247°	21°	-69°	73.72	1.46	28.34
97	276° 30'	248° 30'	20° 30'	-69° 30'	90.58	2.06	34.61
106	276°	248°	20°	-70°	99.04	2.38	37.67
115	276° 30'	248° 30'	20°	-70°	107.5	2.73	40.73
124	276°	248°	20°	-70°	115.96	3.05	43.79
133	278°	250°	19° 45'	-71° 15'	124.43	3.47	47.26
144	277°	249°	19° 30'	-71° 30'	134.8	3.92	51.18

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.4m	3.4	3.1	91
3.4 - 4.7	1.3	1.3	100
4.7 - 7.9	3.2	3.2	100
7.9 - 10.9	3.0	3.0	100
10.9 - 12.1	1.2	1.2	100
12.1 - 13.4	1.3	1.3	100
13.4 - 15.7	2.3	2.3	96
15.7 - 18.7	3.0	3.0	100
18.7 - 19.3	0.6	0.5	83
19.3 - 21.1	1.8	1.1	61
21.1 - 22.4	1.3	1.3	100
22.4 - 22.9	0.5	0.4	80
22.9 - 23.9	1.0	1.0	100
23.9 - 25.0	1.1	1.1	100
25.0 - 26.9	1.9	0.2	11
26.9 - 27.4	0.5	0.3	60
27.4 - 28.8	1.4	1.3	93
28.8 - 30.3	1.5	1.5	100
30.3 - 32.0	1.7	1.7	100
32.0 - 35.0	3.0	3.0	100
35.0 - 37.9	2.9	2.9	100
37.9 - 40.9	3.0	3.0	100
40.9 - 43.9	3.0	3.0	100
43.9 - 46.9	3.0	3.0	100
46.9 - 49.9	3.0	3.0	100
49.9 - 52.9	3.0	3.0	100
52.9 - 55.5	2.4	2.4	100
55.5 - 57.3	1.8	1.8	100
57.3 - 60.3	3.0	3.0	100
60.3 - 63.2	2.9	2.9	100
63.2 - 65.0	1.8	1.8	100
65.0 - 66.0	1.0	1.0	100
66.0 - 69.0	3.0	3.0	100
69.0 - 72.0	3.0	3.0	100
72.0 - 74.4	2.4	2.4	100
74.4 - 77.1	2.7	2.7	100
77.1 - 80.1	3.0	3.0	100
80.1 - 82.7	2.6	2.6	100
82.7 - 85.5	2.8	2.8	100
85.5 - 86.5	1.0	1.0	100
86.5 - 88.9	2.4	2.4	100
88.9 - 91.1	3.0	3.0	100
91.9 - 95.0	3.1	3.1	100
95.0 - 98.0	3.0	3.0	100
98.0 - 98.7	0.7	0.7	100
98.7 - 102.59	3.89	3.89	100
102.59 - 105.2	2.61	2.61	100
105.2 - 106.7	1.5	1.5	100
106.7 - 107.1	0.5	0.4	80
107.1 - 110.1	3.0	3.0	100
110.1 - 113.1	3.0	3.0	100
113.1 - 116.1	3.0	3.0	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
116.1 - 119.1	3.0	3.0	100
119.1 - 122.1	3.0	3.0	100
122.1 - 124.1	1.9	1,7	89
124.1 - 126.4	2.4	1.4	58
126.4 - 129.4	3.0	3.0	100
129.4 - 132.4	3.0	3.0	100
132.4 - 133.8	1.4	1.4	100
133.8 - 136.8	3.0	3.0	100
136.8 - 139.2	2.4	2.4	100
139.2 - 141.0	1.8	1.8	100
141.0 - 143.0	2.0	2.0	100
143.0 - 144.0	1.0	1.0	100
EOH 144.0m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7095	0	1	1.0	1.0	0.02	0.03		
96	1	2	"	"	<0.01	0.01		
97	2	3	"	"	0.01	0.01		
98	17	18	"	"	<0.01	0.01		
99	18	19	"	"	0.06	0.01		
7100	19	20	"	"	0.01	0.03		
02	20	21	"	"	0.02	0.03		
03	21	22	"	"	0.02	0.02		
04	22	23	"	"	0.02	0.02		
05	23	24	"	"	0.03	0.03		
06	24	25	"	"	0.09	0.01		
07	25	26	"	"	0.02	0.02		
08	26	27	"	"	0.02	0.02		
09	27	28	"	"	<0.01	0.01		
10	28	29	"	"	0.01	0.02		
11	53	54	"	"	0.01	0.01		
12	54	55	"	"	0.02	0.02		
13	55	56	"	"	0.29	0.01		
14	56	57	"	"	2.15	0.06		
15	57	58	"	"	0.27	<0.01		
16	58	59	"	"	0.57	0.02		
17	59	60	"	"	0.45	0.01		
18	60	61	"	"	0.91	0.03		
19	61	62	"	"	0.36	0.01		
20	62	63	"	"	0.13	0.01		
21	63	64	"	"	<0.01	<0.01		
22	64	65	"	"	<0.01	<0.01		
23	65	66	"	"	<0.01	<0.01		
24	66	67	"	"	<0.01	0.01		
25	67	68	"	"	0.19	0.02		
26	68	69	"	"	0.31	0.01		
27	69	70	"	"	0.06	0.01		
28	70	71	"	"	0.01	0.02		
29	71	72	"	"	<0.01			
30	72	73	"	"	0.01			
31	73	74	"	"	0.01			
32	101	102	"	"	0.06	0.01		
33	102	103	"	"	0.08	<0.01		
34	103	104	"	"	0.09	0.01		
35	104	105	"	"	<0.01	0.01		
36	105	106	"	"	0.01	0.02		
37	106	107	"	"	0.02	0.02		
38	107	108	"	"	0.01	0.01		
39	108	109	"	"	<0.01	0.01		
40	109	110	"	"	0.02	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7141	110	111	1.0	1.0	0.05	0.01		
42	111	112	"	"	0.13	0.01		
43	112	113	"	"	0.08	<0.01		
44	113	114	"	"	0.57	0.06		
45	114	115	"	"	0.04	<0.01		
46	115	116	"	"	<0.01	0.01		
47	116	117	"	"	0.01	0.01		
48	117	118	"	"	<0.01	0.01		
49	118	119	"	"	0.02	0.01		
50	119	120	"	"	<0.01	<0.01		
51	120	121	"	"	<0.01	0.01		
52	121	122	"	"	0.06	<0.01		
53	122	123	"	"	<0.01	<0.01		
54	123	124	"	"	<0.01	<0.01		
55	124	125	"	"	<0.01	<0.01		
56	125	126	"	"	0.02	0.01		
57	126	127	"	"	0.02	<0.01		
58	127	128	"	"	0.02	0.01		
59	128	129	"	"	<0.01	<0.01		
60	129	130	"	"	0.25	0.01		
61	130	131	"	"	0.15	<0.01		
62	131	132	"	"	0.02	0.02		
63	132	133	"	"	0.01	0.02		
64	133	134	"	"	0.01	0.01		
65	134	135	"	"	<0.01	<0.01		
66	135	136	"	"	<0.01	0.01		
67	136	137	"	"	0.03	0.02		
68	137	138	"	"	0.03	0.02		
69	138	139	"	"	0.01	0.01		
70	139	140	"	"	0.02	0.02		
71	140	141	"	"	0.02	0.02		
72	141	142	"	"	0.02	0.04		
73	142	143	"	"	0.02	0.04		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/5

0.0 - 18.7m BIOTITE/PYROXENE HORNFELS

This unit is generally broken for most of its length, only between 7.5 and 15.5m is the core in large sections (approx. 20.0 - 60.0cm).

Its colour is mostly a purplish grey but with considerable green and darker grey bands within it.

The whole unit is disturbed, in some places it has re-lithified, in others the core is loose and broken. No regular bedding is present.

There is a small amount of mineralisation at the very start of the core, and some patchy mineralisation occurs in the last 2 m.

An aplite dyke occurs at 6.3 - 7.0m

18.7 - 28.4 FAULT ZONE/APLITE

This is a region of poor recoveries, very broken and loose core and considerable clay. Much of the core recovered is vughy and poorly re-cemented.

From approximately 19.0 - 23.5m the lithology is aplite and the remainder is biotite hornfels.

Poor mineralisation is locally present.

28.4 - 42.4 BIOTITE HORNFELS

This rock is a massive, competent, fine grained, light to dark grey biotite hornfels.

There is no mineralisation. The rock is disturbed @ 33.7m, and these are no interbeds of differing lithologies.

Bedding	32°	to	LCA @	28.45m
Joint	36°	to	LCA @	37.4m

42.4 - 54.6 BIOTITE HORNFELS

This is the same unit as above, fine grained, light to dark grey, generally becoming darker with depth. No mineralisation is present and bedding is rare.

Bedding	45°	to	LCA @	43.7m
	35°			46.5m
Joint	33°			45.4m

A white quartz vein 1cm wide occurs @ 47.6m.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/5

54.6 - 72.6m GARNET SKARN/MARBLE

This unit is composed of unmineralised marble, and mineralised andradite skarn. It is separated from the biotite hornfels by a fault at 54.6 - 55.6m indicated by crushed or broken rock, clay minerals and slickensides.

55.5 - 62.3m	Brown, medium grained, well mineralised andradite garnet skarn. Some pyroxene hornfels, green coloured interbeds in the lower 2m.
62.3 - 67.7	Marble. This rock is light grey in colour fine grained, commonly disturbed but competent.
67.7 - 68.8	Mineralised andradite skarn.
68.8 - 72.6	Marble.

72.6 - 85.55 BANDED BIOTITE HORNFELS

A reasonably uniform rock type, dominantly, dark, fine grained biotite hornfels. There is also minor interbedded green pyroxene hornfels which may in places appear slighty podded e.g. @ 73.0m

This unit is unmineralised and is a competant rock.

A 10cm wide quartz vein occurs at 81.7m.

Bedding	60^{o}	to LCA @	75.2m
Bedding	47^{o}		82.3m
Bedding	50^{o}		84.1m
Joint	20^{o}		80.4m

85.55 - 98.6 BIOTITE HORNFELS (PODDED)

This is a continuation of the previous unit, and maintains its overall massive, dark grey appearance. It is podded in places. No mineralisation is present.

Bedding	60^{o}	to LCA @	86.55m
Bedding	62^{o}		91.0m
Bedding	61^{o}		97.75m

98.6 - 117.3 PYROXENE GARNET HORNFELS

This unit is podded and in places is well mineralised. Lithologies present include andradite skarn. Some calcite pods and biotite and pyroxene hornfels.

The unit is typically disturbed and in addition broken and loose core @ 106.5m indicates close jointing.

Joint 6^{o} to LCA @ 109.4m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/5

117.3 - 140.2m BANDED GARNET SKARN

This unit is probably equivalent to C Lens. It is well bedded and heterogeneous. The principal constituents are:

a. A pale to light grey marble, with or without grossular garnet, it is unmineralised and has a moderate grain size.

b. A brown andradite skarn usually in thin beds but with a moderate grain size. It is poorly mineralised.

c. Interbeds of green pyroxene hornfels which may be up to 40cm thick, and are fine grained.

d. Purplish fine grained biotite hornfels.

These last two are mostly found at the base of the unit.

Faulting is indicated at these points.

@ 117.4 Broken rock with a clay filling.
120.9 Clay plug 10cm long.
@ 125 - 126m Loss of core, very broken and lose core, much clay development.
@ 136.4 Broken and fractured rock with some clay development.

Bedding	90^{o}	to	LCA	@ 126.45m
Bedding	72^{o}			128.3m
Bedding	62^{o}			132.7m
Bedding	54^{o}			137.9m

The mineralisation is often confined to thin veins eg 135.3m.

140.2 - 144.0m GRANITE

This intrusive is coarse grained, (0.5mm) equigranular rock.

Albite, quartz, mica, orthoclase and amphibole and the major constituents. Some secondary chlorite is developed, together with red iron oxidation staining.

Most of the rock is fractured and broken.

EOH 144.0m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 325/5

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
7106	0.09	0.01	8279	0.07	<0.01	8280	0.062		8281			650 p.p.m.
7115	0.27	<0.01	8282	0.38	<0.01	8283	0.380		8284	0.45		
7126	0.31	0.01	8285	0.47	<0.01	8286	0.440		8287	0.44		
7142	0.13	0.01	8288	0.16	<0.01	8289	0.180		8290	0.17		
7160	0.25	0.01	8291	0.24	<0.01	8292	0.270		8293	0.26		


DDH BH 325/5
114.11 — 130.00 m.


DDH BH 325/5
130.00 — 144.00 m.


DDH BH 325/5
0.00 — 13.40 m.


DDH BH 325/5
13.40 — 27.95 m.


DDH BH 325/5
27.95 — 42.40 m.


DDH BH 325/5
42.40 — 56.66 m.


DDH BH 325/5
56.66 — 71.03 m.


DDH BH 325/5
71.03 — 85.55 m.


DDH BH 325/5
85.55 — 95.57 m.


DDH BH 325/5
99.57 — 114.11 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/4

PLANNING

PROPOSER: J. M. Clark DEPTH: 90m

LOCATION: Q42 Drive

PURPOSE OF HOLE: To Test Fault Block

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -70° to -71°

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

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 86° 46' $^{\circ}$GRID $^{\circ}$MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40386.97 E 10325.41 N

R.L. OF COLLAR: 951.63

INCLINATION OF HOLE: -69° 16'

PICKED UP BY: B. Lennon DATE: 15/6/79

SUMMARY

LOGGED BY: R. E. S. Davies

RESULTS: No significant Mineralisation

DRILLING

DATE COMMENCED: 11/6/79 DATE TERMINATED: 27/6/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 87.5m

REASON FOR TERMINATION: Not known

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/4

Surveyed method: Multishot
Final depth: 87.5m
Casing depth: 2m

Depth surveyed to: 76.0m
Date surveyed: 26/6/79
Surveyed by: L. Denby
Checked by: R. E. S. Davies

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	E
13	088	060	20° 15'	69° 45'	12.2	0.16	4.5
19	087	059	20° 45'	69° 15'	17.81	0.27	6.63
25	088	060	20° 15'	69° 45'	23.44	0.34	8.71
31	087° 30'	059° 30'	20° 45'	69° 15'	29.06	0.43	10.81
49	087	059°	20° 45'	69° 15'	45.89	0.76	17.18
58	086	058	20°15'	69° 45'	54.33	0.98	20.28
67	086	058	20° 30'	69° 30'	62.76	1.20	23.42
76	087	059	20° 15'	69° 45'	71.2	1.36	26.53
87.5	087	059	20° 15'	69° 45'	81.99	1.57	30.50

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/4

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.75	2.75	2.75	100
2.75 - 3.25	0.50	0.50	100
3.25 - 4.95	1.70	1.7	100
4.95 - 6.60	1.65	1.65	100
6.60 - 8.40	1.8	1.8	100
8.40 - 9.0	0.5	0.5	83
9.0 - 9.5	0.4	0.4	80
9.5 - 9.6	0.1	0.1	100
9.6 - 10.5	0.9	0.8	89
10.5 - 13.1	2.6	2.6	100
13.1 - 14.55	1.45	1.45	100
14.55 - 15.1	0.55	0.55	100
15.1 - 16.0	0.9	0.9	100
16.0 - 18.5	2.5	2.5	100
18.5 - 20.65	2.15	2.15	100
20.65 - 23.05	2.4	2.4	100
23.05 - 26.05	3.0	3.0	100
26.05 - 29.05	3.0	3.0	100
29.05 - 32.05	3.0	3.0	100
32.05 - 35.05	3.0	3.0	100
35.05 - 35.5	0.45	0.45	100
35.5 - 38.5	3.0	3.0	100
38.5 - 41.5	3.0	3.0	100
41.5 - 44.5	3.0	3.0	100
44.5 - 47.5	3.0	3.0	100
47.5 - 50.5	3.0	3.0	100
50.5 - 53.5	3.0	3.0	100
53.5 - 56.5	3.0	3.0	100
56.5 - 58.6	2.1	2.1	100
58.6 - 60.3	1.7	1.6	94
60.3 - 63.05	2.65	2.65	100
63.05 - 66.05	3.0	3.0	100
66.05 - 69.1	3.05	3.05	100
69.1 - 71.5	2.4	.24	100
71.5 - 72.3	0.8	0.8	100
72.3 - 75.2	2.9	2.9	100
75.2 - 75.6	0.4	0.4	100
75.6 - 77.7	2.1	2.1	100
77.7 - 80.7	3.0	3.0	100
80.7 - 82.8	2.1	2.1	100
82.8 - 83.5	0.7	0.7	100
83.5 - 84.2	0.7	0.5	71
84.2 - 85.2	1.0	0.6	60
85.2 - 86.6	1.4	1.1	79
86.6 - 87.5	0.9	0.7	78
EOH 87.5m			

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/4

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7650	16	17	1.0	1.0	0.01	0.01		
51	17	18	"	"	0.01	0.01		
52	18	19	"	"	0.02	0.01		
53	19	20	"	"	0.03	0.01		
54	20	21	"	"	0.01	0.01		
55	21	22	"	"	0.01	0.01		
56	22	23	"	"	0.01	0.01		
57	23	24	"	"	0.01	0.01		
58	24	25	"	"	0.03	0.01		
59	25	26	"	"	0.01	0.01		
60	26	27	"	"	0.15	0.01		
61	27	28	"	"	0.01	0.01		
62	28	29	"	"	0.01	0.01		
63	32	33	"	"	0.01	0.01		
64	33	34	"	"	0.01	0.01		
65	34	35	"	"	0.04	0.01		
66	35	36	"	"	0.01	0.01		
67	44	45	"	"	0.01	0.01		
68	45	46	"	"	0.01	0.01		
69	46	47	"	"	0.01	0.01		
70	47	48	"	"	0.01	0.01		
71	48	49	"	"	0.01	0.01		
72	49	50	"	"	0.01	0.01		
73	50	51	"	"	0.01	0.01		
74	51	52	"	"	0.01	0.01		
75	52	53	"	"	0.01	0.01		
76	53	54	"	"	0.01	0.01		
77	54	55	"	"	0.01	0.01		
78	55	56	"	"	0.01	0.01		
79	56	57	"	"	0.01	0.01		
80	57	58	"	"	0.01	0.01		
81	58	59	"	"	0.01	0.01		
82	59	60	"	"	0.01	0.01		
83	60	61	"	"	0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/4

0.0 - 9.5m **BIOTITE HORNFELS**

This unit varies in colour from light grey through pale green and purple to almost black. The rock is mostly well bedded and the colours are charachteristic for each bed. Grain size is fine throughout.

The first metre of core is rubble, and up to about 2.75m, the rock is brecciated.

Aplite dyke from 3.0m - 3.8m.
From 8.2 - 9.0m the rock is generally broken, fractured and clayey, indicating a fault.

Bedding	40° to LCA @	4.4m
Bedding	44°	6.5m
S_1	27°	8.6m
S_1	34°	6.4m

No scheelite present.

9.5 - 13.1 **APLITE**

This intrusion varies in colour from light grey to orange red with rare patches of dark green. It is altered, proven by chlorites and oxidation of iron. The grain size is fine to medium, and is overall a competant rock although there are a number of significant joints.

No scheelite is present.

S_1	$45 - 50^{\circ}$	to LCA over most of the unit.
S_1	12°	to LCA @ 11.5m

13.1 - 27.25 **PYROXENE HORNFELS**

A fairly homogeneous unit generally light to dark grey in colour, though it frequently has a greenish aspect. Rare purple coloured beds also occur eg 17.1m.

Biotite hornfels consitute probably 40% of the unit and frequently carry sulphides eg 16.3m

A major fault occurs from 18.17m - 20.75m, indicated by a crush rock of clay and many joints in the remaining competent rock. This area is mineralised but only poorly. Grossular garnet present at 19.8m.

Although some calcite pods are present eg at 25.5m the unit does not seem to be part of the pyroxene garnet hornfels proper.

Bedding	69°	to LCA @	16.3m
Bedding	50°		22.4
S_1	46°		14.95
S_1	16		25.25m

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/4

27.25 - 42.5 CALC HORNFELS

This marble unit is mostly uniform throughout its length. A light grey colour and moderate grain size with rare bedding are charachteristic.

From 32 - 35m there is a garnet hornfels layer which grades into the marble at both contacts. It has a brown colour. Mineralisation is confined to this layer and is only poor.

Bedding	40°	to LCA @ 38.2
Bedding	57°	41.6
S_1	18°	28.9

The unit is not well jointed. The upper part of the unit is disturbed, and has no bedding, it does have a slight podded appearance.

42.5 - 87.5 BANDED MARBLE/PYROXENE HORNFELS/BIOTITE HORNFELS

This is a heterogeneous unit and is best subdivided.

Overall the unit is very well bedded, has a generally fine grain size and is poorly mineralised from 46 - 59m. Generally the rock has few joints but these are pronounced. Major faulting is exposed at:

57.3 - 60m	Crushed rock, clay
72m	Broken and fractured rock
81.0 - 87.5m	Almost completely broken down to rubble and clay. Much iron staining.

Small faults at:

46m	Clay and rubble
55.5	Swelling clays
78.3	Swelling clays

Individual units:

42.5 - 48.7	Mostly marble
48.7 - 60.0	Well interbedded pyroxene hornfels/biotite hornfels
60.0 - 65.3	Mainly marble with minor biotite hornfels
65.3 - 87.5	Mainly well bedded biotite hornfels, brown in upper part - black in lower core.

P.T.O.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/4

Bedding	54°	to	LCA	@	46.5m
"	45°	"	"	"	54.5m
"	22°	"	"	"	62.2m
"	23°	"	"	"	65.9m
"	26°	"	"	"	74.8m
"	48°	"	"	"	81m
S_1	60°	"	"	"	45.6m
"1	24°	"	"	"	52.1m
"	24°	"	"	"	61.4m
"	12°	"	"	"	67.9m
"	12	"	"	"	67.8m

EOH 87.5m


DDH BH 325/4
0.00 — 13.20 m.


DDH BH 325/4
13.20 — 27.56 m.


DDH BH 325/4
27.56 — 42.19 m.


DDH BH 325/4
42.19 — 56.92 m.


DDH BH 325/4
56.92 — 70.90 m.


DDH BH 325/4
70.90 — 85.20 m.


DDH BH 325/4
85.20 — 87.50 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/3

PLANNING

PROPOSER: J. M. Clark — DEPTH: 120m

LOCATION: Q42 Drive

PURPOSE OF HOLE: To Test Fault Block

PROPOSED CO-ORDS: 40385 E 10325 N

INCLINATION: -86

BEARING: 090 °GRID °MAG

TARGET: E N

DEPTH:

CHECKED BY: DATE:

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 75° 10' °GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40386.6 E 10325.4 N

R.L. OF COLLAR: R-951.6

INCLINATION OF HOLE: -84° 30'

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

SUMMARY

LOGGED BY: J. Clark

RESULTS: 67 - 73m, 6m @ 1.72% WO_3
98 - 101m, 3m @ 0.48% WO_3

DRILLING

DATE COMMENCED: 17/5/79 DATE TERMINATED: 7/6/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH: PROPOSER:

EXTENSION:

FINAL DEPTH: 127.4m

REASON FOR TERMINATION: Not known

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/3

Surveyed method: Multishot Camera
Final depth: 127.4m
Casing depth: 1.0m

Depth surveyed to: 127.4m
Date surveyed: 7/6/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True Vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corr.		N	E
4	087	59	5° 45'	-84.25°	3.98	0.02	0.40
19	075	47	5° 45'	-84.25°	18.91	0.41	1.85
37	074	46	5°	-85°	36.84	0.84	3.36
49	076	48	5°	-85°	48.79	1.09	4.38
56	074	46	5°	-85°	55.76	1.26	4.97
65	074	46	4° 45'	-85.25°	664.73	1.46	5.68
74	073	45	4° 45'	-85.25°	73.70	1.68	6.39
86	072	44	4° 15'	-85.75°	85.67	1.96	7.24
98	065	37	4° 15'	-85.75°	97.64	2.34	8.05
107	066	38	4° 30'	-85.5°	106.61	2.63	8.70
117	068	40	4° 45'	-84.25°	116.58	2.94	9.46
127.4	064	36	4° 15'	-85.75°	126.95	3.28	10.15

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.0	2.0	2.0	100
2.0 - 3.5	1.5	1.5	100
3.5 - 4.4	0.9	0.9	100
4.4 - 5.1	0.7	0.7	100
5.1 - 5.7	0.6	0.6	100
5.7 - 6.5	0.8	0.8	100
6.5 - 8.5	2.0	2.0	100
8.5 - 10.1	1.6	1.6	100
10.1 - 11.1	1.0	1.0	100
11.1 - 11.6	0.5	0.5	100
116. - 12.7	1.1	1.1	100
12.7 - 14.7	2.0	2.0	100
14.7 - 16.7	2.0	2.0	100
16.7 - 17.4	0.7	0.7	100
17.4 - 20.0	2.6	2.6	100
20.0 - 23.0	3.0	3.0	100
23.0 - 26.1	3.1	3.1	100
26.1 - 28.75	2.65	2.65	100
28.75 - 29.3	0.65	0.65	100
29.3 - 32.3	3.0	3.0	100
32.3 - 35.3	3.0	3.0	100
35.3 - 38.3	3.0	3.0	100
38.3 - 41.3	3.0	3.0	100
41.3 - 41.7	0.4	0.4	100
41.7 - 44.0	2.3	2.3	100
44.0 - 45.3	1.3	1.3	100
45.3 - 46.0	0.7	0.7	100
46.0 - 49.0	3.0	3.0	100
49.0 - 50.5	1.5	1.5	100
50.5 - 53.5	3.0	3.0	100
53.5 - 56.5	3.0	3.0	100
56.5 - 59.5	3.0	3.0	100
59.5 - 62.5	3.0	3.0	100
62.5 - 65.5	3.0	3.0	100
65.5 - 68.5	3.0	3.0	100
68.5 - 71.5	3.0	3.0	100
71.5 - 74.5	3.0	3.0	100
74.5 - 77.1	2.6	2.6	100
77.1 - 80.1	3.0	3.0	100
80.1 - 83.1	3.0	3.0	100
83.1 - 86.1	3.0	3.0	100
86.1 - 89.0	2.9	2.9	100
89.0 - 91.5	2.5	2.5	100
91.5 - 93.5	2.0	0.9	45
93.5 - 95.3	1.8	0.8	11
95.3 - 96.8	1.5	0.7	47
96.8 - 98.8	2.0	2.0	100
98.8 - 101.8	3.0	3.0	100
101.8 - 104.3	2.5	2.7	108
104.3 - 107.2	2.9	2.9	100
107.2 - 109.3	2.1	2.5	119
109.3 - 110.2	0.9	0.9	100
110.2 - 113.2	3.0	2.8	93

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
113.2 - 116.1	2.9	2.75	95
116.1 - 119.1	3.0	3.0	100
119.1 - 122.1	3.0	2.95	98
122.1 - 125.1	3.0	3.0	100
125.1 - 127.0	1.9	1.9	100
127.0 - 127.4	0.4	0.4	100

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/3

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7695	28	29	1.0	1.0	< 0.01	0.01		
96	29	30	"	"	< 0.01	0.01		
97	30	31	"	"	0.02	0.01		
98	31	32	"	"	< 0.01	0.01		
99	32	33	"	"	0.02	0.01		
7700	33	34	"	"	0.14	0.01		
7601	34	35	"	"	0.01	0.01		
02	35	36	"	"	1.05	0.03		
03	36	37	"	"	0.01	0.01		
04	37	38	"	"	<0.01	0.01		
05	38	39	"	"	0.09	0.01		
06	39	40	"	"	0.25	0.01		
07	40	41	"	"	0.05	0.01		
08	41	42	"	"	0.73	0.02		
09	42	43	"	"	0.81	0.03		
10	43	44	"	"	0.01	0.01		
11	57	58	"	"	<0.01	0.01		
12	58	59	"	"	0.01	0.01		
13	59	60	"	"	<0.01	0.01		
14	60	61	"	"	0.02	0.01		
15	61	62	"	"	0.01	0.01		
16	62	63	"	"	0.53	0.01		
17	63	64	"	"	0.23	0.02		
18	64	65	"	"	0.16	0.01		
19	65	66	"	"	0.01	0.01		
20	66	67	"	"	0.15	0.01		
21	67	68	"	"	0.57	0.02		
22	68	69	"	"	5.4	0.11		
23	69	70	"	"	0.52	0.02		
24	70	71	"	"	2.63	0.06		
25	71	72	"	"	1.30	0.04		
26	72	73	"	"	1.32	0.04		
27	73	74	"	"	0.13	0.01		
28	74	75	"	"	<0.01	0.01		
29	75	76	"	"	<0.01	0.01		
30	97	98	"	"	<0.01	0.01		
31	98	99	"	"	0.35	0.02		
32	99	100	"	"	0.70	0.03		
33	100	101	"	"	0.39	0.01		
34	101	102	"	"	0.02	0.01		
35	102	103	"	"	0.02	0.01		
36	108	109	"	"	0.02	0.01		
37	109	110	"	"	0.05	0.01		
38	110	111	"	"	1.16	0.04		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/3

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO_3	Mo		
BH 7639	111	112	1.0	1.0	1.30	0.03		
40	112	113	"	"	0.24	0.01		
41	113	114	"	"	<0.01	0.01		
42	114	115	"	"	0.47	0.02		
43	115	116	"	"	0.29	0.02		
44	116	117	"	"	<0.01	0.01		
45	117	118	"	"	0.09	0.01		
46	118	119	"	"	0.04	0.01		
47	119	120	"	"	0.13	0.01		
48	120	121	"	"	0.01	0.01		
49	121	122	"	"	<0.01	0.01		

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH-325/3

0.0 -- 17.40m BIOTITE HORNFELS

Purplish brown hornfels with irregular lenses of green pyroxene hornfels and grey actinolite hornfels.

0.0 - 3.2m, 4.0 - 5.2m.	Variably sized, angular light brown rock fragments in a dark brown matrix.
3.2 - 4.0	Fine grained light grey aplite which is mildly ironstained in places.
11.7 - 16.5	Fine grained aplite with abundant light pink ironstaining thoughout.

Core is mildly broken thoughout, with the more severe zones being at 5.2 - 5.7m, 6.8m, 11.1 - 11.3m, 17.3 - 17.4m. Athough the base of the unit is sharp, it does not appear to be a fault zone.

Bedding does not appear to be present.

Fractures/m = 14
Recovery = 100%

17.40 - 43.70 PYROXENE - GARNET - CALCITE HORNFELS

Most of this unit is similar to the typical pyroxene garnet hornfels at the top of the C-lens sequence.

17.4 - 19.9m	Pyroxene hornfels containing fragments and lenses of calcite and minor biotite lenses. Most fragments are aligned at 59° to core axis. At 18.7m there is a fibrous calcite vein at 35° to core axis.
19.9 - 20.9	Podded biotite hornfels, the pods being composed of pyroxene which occasionally have calcite cores.
20.9 - 26.3	Pyroxene garnet hornfels in which small grossular rimmed calcite fragments are set in a lightish green pyroxene rich matrix.
26.3 - 27.5	Podded biotite/pyroxene hornfels with minor pyroxene garnet hornfels.
27.5 - 28.95	Pyroxene hornfels which has fine calcite banding (?bedding) at 46°.
28.95 - 43.7	Pyroxene-garnet hornfels in which fragments are not as obvious and have been replaced by calcite/actinolite aggregates. Grossular is abundant in the matrix and minor andradite is present.

Scheelite is variably distributed and is concentrated in calcite/actinolite aggregates, eg 33.75 - 34.1m, 34.5 - 35.1m, 35.6 - 36.0m, 41.14 - 41.3m, 41.7 - 42.4m.

41.6 - 41.7m	Broken core, probably associated with a calcite vein at 37° to core axis.
42.2 - 43.7m	Green pyroxene hornfels with irregular calcite veinlets or fine disrupted beds. The base of the unit is sharp along a calcite/chlorite vein.

Fractures/m = 5
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH325/3

43.70 - 48.90 BIOTITE HORNFELS

Purplish brown biotite hornfels with beds and lenses of pyroxene hornfels containing minor calcite and grossular pods.

45.25 - 45.3m Minor broken core.

Bedding and banding are 45° to core axis.

Fractures/m = 8
Recovery = 100%

48.90 - 66.00 ?PYROXENE - GARNET HORNFELS

This is another atypicial pyroxene - garnet hornfels unit. Small often angular grossular rimmed calcite pods are present in a light green pyroxene, grossular, calcite quartz matrix.. Minor biotite is present in the matrix at 49.8 - 50.1 and 58.0 - 59.0m.

Scheelite is only rarely present in the unit as sparsely scattered fine to medium grains. Small concentrations are present at 49.10 - 49.25m and 64.4 - 64.6m.

58.6m Minor broken core.
64.6 - 66.0 Core resembles very mildly disrupted banded footwall beds. Marble beds are rimmed by grossular and have an average conventration of 45 - 55° to core axis.

Fractures/m = 6
Recovery = 100%

66.0 - 74.25 GARNET HORNFELS

Andradite garnet hornfels with abundant pyroxene and calcite. There are irregular aggregates of coarse grained amphibole and calcite throughout. At the top of the unit (to 69.9m) there are the beds of barren pyroxene hornfels (at 55 - 60° to core axis.) amongst the scheelite rich garnet hornfels.

Scheelite is present as fine grained disseminations, and as irregular scattered medium to coarse grains.

The lower boundary is gradational through a scheelite poor pyroxene hornfels to barren marble.

Minor calcite/chlorite veinlets are present thoughout.

Fractures/m = 4
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/3

74.25 - 83.10 MARBLE

Well bedded light pink to grey, medium grained marble. The beginning of the unit is slightly sugary and contains minor broken core 74.4 - 74.5m, 76.1m, 77.1 - 77.2m. Below this, the unit becomes gradational with banded footwall beds, as there are scattered thin beds of pyroxene and biotite hornfels.

Grossular is present throughout, but the unit has no scheelite.

At 75.5m bedding is 40^{o} to core axis.
81.1m 45^{o}

Fractures/m = 10
Recovery = 100%

83.10 - 103.50 BANDED FOOTWALL BEDS

Interbedded marble, biotite and pyroxene hornfels, with marble being considerably more abundant than the other rock types. Bedding is regular at 45^{o} to core axis throughout the unit.

89.0m, 89.15m, 89.7m White/light grey veins of clay (expanding) with minor calcite which have caused minor broken core.

92.0 - 96.2 Broken core with considerable core loss (only 17% recovery) of the core recovered. Some fracture surface are ironstained and there is minor calcite veining. The section could be a clay/calcite bed which has weathered away.

97.6m Minor broken core.

98.5 - 100.8 Bedded garnet hornfels containing thickly disseminated scheelite. Pyroxene and minor marble are interbedded with the garnet hornfels.

Minor ironstaining is present on fractures near the end of the unit.

Fractures/m = 7
Recovery = 100%

103.50 - 104.20 FAULT ZONE

Broken and very clayey core. There are several loosely cemented (probably by clay) breccia zones at 25^{o} and 45^{o} to core axis. There has been considerable caving from this zone, with rubble and clay being present at the start of runs beneath this.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/3

104.20 - 110.00 BIOTITE HORNFELS

Well bedded brown biotite hornfels with lesser amounts of pyroxene hornfels and irregular light grey actinolite rich spots. Bedding averages 40° to the core axis but is very disturbed at either end of the unit (microfaulted at the start of the unit and intensely folded at the base). Clay and rubble zones are present at the start of each run, but this is probably from caving in the fault zone above.

Scheelite is not present.

Fractures/m = 6
Recovery = 100 %

110.60 -127.4 BANDED FOOTWALL BEDS

Interbedded marble, biotite and pyroxene hornfels, with bedding consistently averaging about 75° to core axis.

110.0 - 112.2	Andradite-pyroxene hornfels with some coarse grained actinolite and thickly disseminated fine grained scheelite. Minor broken core is present at 110.2 - 110.4m but this may be cave-in from the fault zone above.
112.2 - 114.5	White fine grained marble with minor interbedded pyroxene hornfels.
114.5 - 115.3	Andradite-pyroxene hornfels with abundant disseminated scheeltie.
115.3 - 127.4	Regularly interbedded banded footwall beds. Small garnet-rich beds containing scheelite are present between 117.7 - 120.0m but this interval does not reach ore grade.
127.0 - 127.4	Bedding is mildly disturbed and reaches 35° to core axis.

Fractures/m = 5
Recovery = 100%

EOH 127.4m

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 325/3

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
7609	0.81	0.03	8345	0.66	<0.01	8346	0.710		8347	0.64		
7621	0.57	0.02	8348	0.62	<0.01	8249	0.600		8350	0.59		
7631	0.35	0.02	8351	0.36	<0.01	8352	0.395		8353	0.38		
7643	0.29	0.02	8354	0.28	<0.01	8355	0.300		8356	0.30		
7700	0.14	0.01	8357	0.19	<0.01	8358	0.230		8359	0.22		


DDH BH 325/3.
0.00 — 13.71 m.

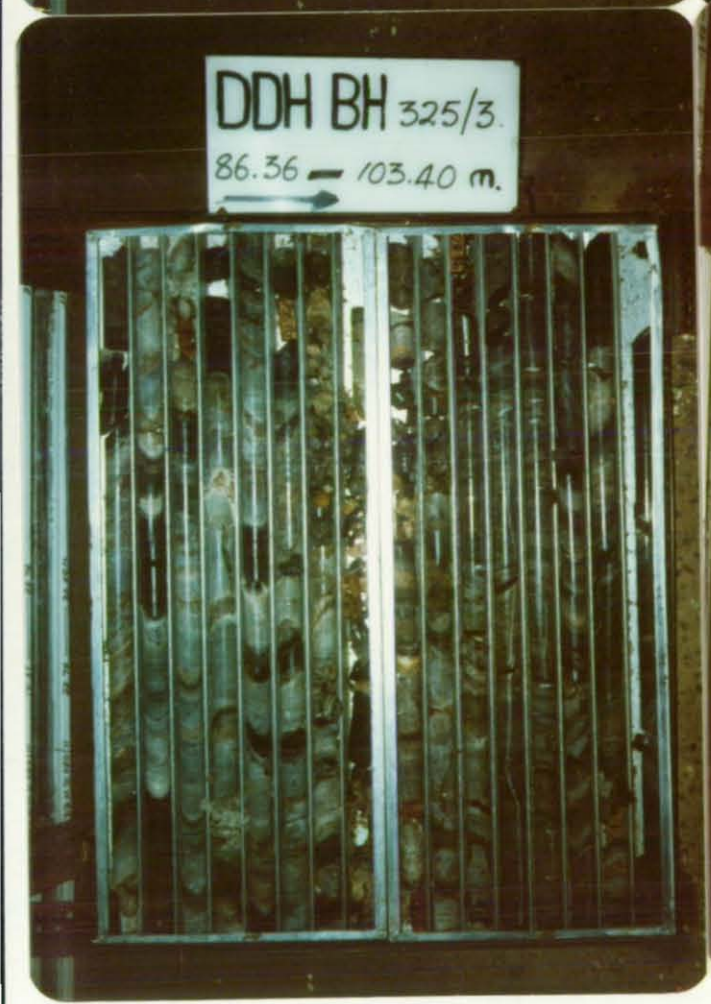

DDH BH 325/3.
13.71 — 27.76 m.

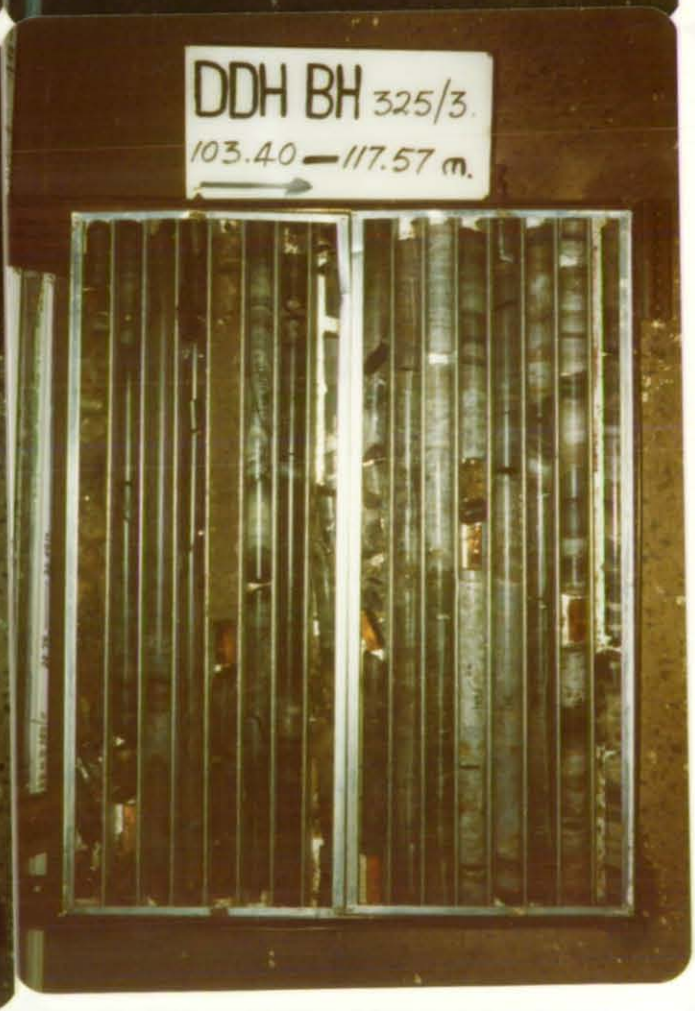

DDH BH 325/3.
27.76 — 42.22 m.


DDH BH 325/3.
42.22 — 56.65 m.


DDH BH 325/3.
56.65 — 71.50 m.


DDH BH 325/3.
71.50 — 86.36. m.


DDH BH 325/3.
86.36 — 103.40 m.


DDH BH 325/3.
103.40 — 117.57 m.


DDH BH 325/3.
117.57 — 127.40 m.

GEOLOGY - KING ISLAND SCHEELITE

CHECK ASSAY DATA

D.D.H. No. BH 325/2

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
6983	0.23	<0.01	8238	0.21	<0.01	8239	0.265		8340	0.25		
6993	0.68	0.01	8241	0.71	<0.01	8242	0.670		8243	0.69		
7040	0.19	0.01	8244	0.21	<0.01	8245	0.300		8246	0.23		
7651	0.18	<0.01	8247	0.12	<0.01	8248	0.135		8249	0.15		
7662	1.60	0.04	8250	1.95	<0.01	8251	2.00		8252	1.83		
7678	0.48	0.01	8253	0.43	<0.01	8254	0.475		8255	0.48		
7688	0.33	0.01	8256	0.42	<0.01	8257	0.410		8258	0.38		

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. BH 325/2

PLANNING

PROPOSER: J. Clark DEPTH: 150

LOCATION: Q 42 Drill Drive

PURPOSE OF HOLE: Test Fault Block

CO-ORDS: 40385 E 10325 N

INCLINATION: -86

BEARING: 270 ^{o}GRID ^{o}MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 270 ^{o}GRID ^{o}MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40386.4 E 10325.3 N

R.L. OF COLLAR 951.6

INCLINATION OF HOLE -86

PICKED UP BY: B. Lennon DATE: 1/5/79

SUMMARY

LOGGED BY: J. Clark

RESULTS: 74 - 82m, 8m @ 0.81% WO_3
106 - 114m, 8m @ 0.72% WO_3
136 - 143m, 7m @ 1.54% WO_3

DRILLING

DATE COMMENCED: 25/4/79 DATE TERMINATED: 16/5/79

DRILLER/CONTRACTOR: ADD

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DATE:

EXTENSION:

FINAL DEPTH: 145m

REASON FOR TERMINATION: Caving between 125 and 143.7m

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/2

Survey method: Multishot
Final depth: 137.0
Casing depth: 1m

Depth surveyed to: 130.0m
Date surveyed: 16/5/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read.	Corrected		S	W
22	262	234	4°	-86°	21.95	0.21	1.53
37	264	236	4°15'	-85.75	36.91	0.33	2.63
55	265	237	4	-86	54.87	0.44	3.89
73	271	243	4	-86	72.83	0.42	5.15
88	274.75	246.5	4	-86	87.79	0.33	6.20
100	272.75	244.5	4	-86	99.76	0.29	7.04
112	272.75	244.5	4	-86	111.73	0.25	7.88
121	274	246	4	-86	120.71	0.21	8.51
130	275	247	4	-86	129.69	0.16	9.14
137	275	247	4	-86	136.67	0.12	9.63

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.1	3.1	2.9	94
3.1 - 7.2	4.1	4.1	100
7.2 - 9.5	2.3	2.3	100
9.5 - 11.5	2.0	2.0	100
11.5 - 12.5	1.0	1.0	100
12.5 - 13.3	0.8	0.8	100
13.3 - 14.3	1.0	0.7	70
14.3 - 15.2	0.9	0.85	94
15.2 - 15.9	0.7	0.7	100
15.9 - 16.5	0.6	0.6	100
16.5 - 17.3	0.8	0.8	100
17.3 - 20.3	3.0	3.0	100
20.3 - 23.3	3.0	3.0	100
23.3 - 24.1	0.8	0.8	100
24.1 - 25.5	1.4	1.4	100
25.5 - 26.0	0.5	0.5	100
26.0 - 27.5	1.5	1.4	93
27.5 - 29.0	1.5	1.6	107
29.5 - 29.5	0.5	0.5	100
29.5 - 32.5	3.0	3.0	100
32.5 - 35.5	3.0	3.0	100
35.5 - 38.0	2.5	2.5	100
38.0 - 41.0	3.0	3.0	100
41.0 - 44.0	3.0	3.0	100
44.0 - 47.0	3.0	3.0	100
47.0 - 50.0	3.0	3.0	100
50.0 - 53.0	3.0	3.0	100
53.0 - 56.0	3.0	3.0	100
56.0 - 59.0	3.0	3.0	100
59.0 - 62.0	3.0	3.0	100
62.0 - 65.0	3.0	3.0	100
65.0 - 68.0	3.0	3.0	100
68.0 - 71.0	3.0	3.0	100
71.0 - 73.2	2.2	2.2	100
73.2 - 77.0	3.8	3.0	100
77.0 - 80.0	3.0	3.0	100
80.0 - 83.0	3.0	3.0	100
83.0 - 86.0	3.0	3.0	100
86.0 - 89.0	3.0	3.0	100
89.0 - 89.7	0.3	0.7	233
89.7 - 91.0	1.3	1.3	100
91.0 - 91.2	0.2	0.2	100
91.2 - 92.3	1.3	1.3	100
92.5 - 95.5	3.0	3.0	100
95.5 - 98.5	3.0	3.0	100
98.5 - 99.6	1.1	1.1	100
99.6 - 100.5	0.9	0.9	100
100.5 - 101.8	1.3	1.3	100
101.8 - 102.3	0.5	0.5	100

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/2

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
102.3 - 104.3	2.0	2.0	100
104.2 - 106.3	2.0	2.0	100
106.3 - 109.3	3.0	3.0	100
109.3 - 112.3	3.0	3.0	100
112.3 - 115.3	3.0	3.0	100
115.3 - 117.3	2.0	1.9	95
117.3 - 118.5	1.2	1.2	100
118.5 - 119.2	0.7	0.7	100
119.2 - 121.5	2.3	2.3	100
121.5 - 124.6	3.1	3.0	100
124.6 - 125.0	0.4	0.4	100
125.0 - 127.0	7.0	0.9	45
127.0 - 130.0	3.0	2.8	93
130.0 - 133.0	3.0	3.0	100
133.0 - 135.5	2.5	2.5	100
135.5 - 136.1	0.6	1.0	167
136.1 - 137.2	1.1	0.7	64
137.2 - 140.2	3.0	2.8	100
140.2 - 143.2	3.0	3.0	100
143.2 - 145.0	1.8	1.8	100

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/2

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
BH 7036	47	48	1.0	1.0	<0.01	<0.01		
37	48	49	"	"	<0.01	<0.01		
38	49	50	"	"	<0.01	<0.01		
39	50	51	"	"	0.14	<0.01		
40	51	52	"	"	0.19	0.01		
41	52	53	"	"	<0.01	<0.01		
42	53	54	"	"	0.35	0.01		
43	54	55	"	"	0.13	<0.01		
44	55	56	"	"	0.13	<0.01		
45	56	57	"	"	0.13	<0.01		
46	57	58	"	"	<0.01	<0.01		
47	58	59	"	"	<0.01	<0.01		
48	59	60	"	"	<0.01	<0.01		
49	60	61	"	"	<0.01	<0.01		
50	61	62	"	"	<0.01	<0.01		
6974	62	63	"	"	<0.01	<0.01		
75	63	64	"	"	<0.01	<0.01		
76	64	65	"	"	<0.01	<0.01		
77	65	66	"	"	<0.01	<0.01		
78	66	67	"	"	<0.01	<0.01		
79	67	68	"	"	<0.01	<0.01		
80	68	69	"	"	<0.01	<0.01		
81	69	70	"	"	<0.01	<0.01		
82	70	71	"	"	<0.01	<0.01		
83	71	72	"	"	0.23	<0.01		
84	72	73	"	"	0.45	<0.01		
85	73	74	"	"	0.03	<0.01		
86	74	75	"	"	0.98	0.01		
87	75	76	"	"	1.24	0.01		
88	76	77	"	"	1.02	0.01		
89	77	78	"	"	0.90	0.02		
90	78	79	"	"	0.90	0.02		
91	79	80	"	"	0.54	0.01		
92	80	81	"	"	0.30	0.01		
93	81	82	"	"	0.68	0.01		
94	82	83	"	"	0.22	0.01		
95	83	84	"	"	0.27	0.01		
96	84	85	"	"	<0.01	<0.01		
97	85	86	"	"	<0.01	<0.01		
98	86	87	"	"	0.03	<0.01		
99	87	88	"	"	0.05	<0.01		
7000	88	89	"	"	0.21	<0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY—KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/2

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
BH 7651	89	90	1.0	1.0	0.18	<0.01		
52	96	97	"	"	<0.01	<0.01		
53	97	98	"	"	<0.01	<0.01		
54	98	99	"	"	<0.01	<0.01		
55	99	100	"	"	0.05	<0.01		
56	100	101	"	"	<0.01	0.01		
57	101	102	"	"	<0.01	<0.01		
58	102	103	"	"	<0.01	<0.01		
59	103	104	"	"	<0.01	<0.01		
60	104	105	"	"	0.11	0.01		
61	105	106	"	"	0.04	<0.01		
62	106	107	"	"	1.60	0.04		
63	107	108	"	"	0.24	0.01		
64	108	109	"	"	0.57	0.02		
65	109	110	"	"	0.72	0.02		
66	110	111	"	"	1.26	0.05		
67	111	112	"	"	0.19	0.01		
68	112	113	"	"	0.42	0.01		
69	113	114	"	"	0.76	0.01		
70	114	115	"	"	<0.01	<0.01		
71	115	116	"	"	<0.01	<0.01		
72	119	120	"	"	<0.01	<0.01		
73	120	121	"	"	<0.01	<0.01		
74	121	122	"	"	<0.01	<0.01		
75	122	123	"	"	0.19	0.01		
76	123	124	"	"	0.03	0.01		
77	124	125	"	"	0.06	<0.01		
78	128	129	"	"	0.48	0.01		
79	129	130	"	"	0.07	0.01		
80	130	131	"	"	0.01	<0.01		
81	131	132	"	"	<0.01	<0.01		
82	132	133	"	"	0.13	0.01		
83	133	134	"	"	0.24	0.01		
84	134	135	"	"	0.47	0.02		
85	135	136	"	"	0.06	0.01		
86	136	137	"	"	0.49	0.02		
87	137	138	"	"	1.03	0.02		
88	138	139	"	"	0.33	0.01		
89	139	140	"	"	0.80	0.01		
90	140	141	"	"	2.97	0.03		
91	141	142	"	"	4.8	0.08		
92	142	143	"	"	1.17	0.03		
93	143	144	"	"	0.03	0.01		
94	144	145	"	"	<0.01	<0.01		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY. - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/2

0.0 - 13.90m BIOTITE HORNFELS

Purplish brown biotite hornfels with minor interbedded green pyroxene hornfels core is very broken at the beginning of the unit (0.20m) and remains moderately broken throughout.

3.9 - 3.8m Medium grained light pink aplite.

Bedding is mildly disturbed.
At 6.2m bedding is 35 to core axis.
11.8m " 38° " "

Fractures/m = 14
Recovery = 99%

13.90 - 17.50 APLITE

Medium grained light pink aplite with mild ironstaining along fractures. Black biotite crystals are sparsely distributed.

Fractures/m = 12
Recovery = 90%

17.50 - 28.20 MARBLE

A variable unit consisting of pyroxene, grossular/pyroxene and pryoxene/calcite hornfels with minor marble. This unit is A lens.

Sparsely scattered fine to medium grained scheelite cyrstals are presents in grossular/amphibole area. Pyrrhotite is a common accesory mineral.

22.4 - 22.8m, 23.6 - 24.1m Broken core along swelling calcite/chlorite veins.

The base of the unit is transitional with underlying biotite hornfels. Bedding is not present.

Fractures/m = 8
Recovery = 100%

28.20 - 46.30 BIOTITE HORFNELS

Purplish brown biotite hornfels with small interbeds of pyroxene and actinolite rich rock. Abundant pyrrhotite with lesser pyrite and chalcopyrite are present as stringers and blebs.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/2

29.3 - 30.0 Interformational breccia with lighter coloured fragments in a darker brown matrix.

?Bedding is uniform at 45 - 55° to core axis.

46.0 - 46.1m Minor broken core.

Fractures/m = 6
Recovery = 100%

46.30 - 74.30 PYROXENE-GARNET HORNFELS

Calcite pods often rimmed by grossular are present in a matrix of pyroxene and biotite with lesser amounts of grossular and calcite. Fine grained scheelite is sparsely distributed throughout.

50.0 - 51.2m Moderately disseminated fine grained scheelite in pyroxene-garnet hornfels with a more grossular rich matrix.

59.9 - 64.0 Matrix has abundant biotite. Minor broken core is present along calcite/chlorite veins.

71.4 - 72.9 Well mineralized pyroxene-garnet hornfels containing fine grained thickly disseminated scheelite. Calcite/actinolite pods are present in a pyroxene/andradite/grossular matrix.

Fractures/m = 5
Recovery = 100%

74.30 - 80.05 GARNET HORNFELS

Fine grained andradite garnet hornfels containing abundant pyroxene and small (5mm) pods of calcite. Scheelite is very fine to fine grained and very thickly disseminated throughout the unit.

Fractures/m = 3
Recovery = 100%

80.05 - 84.00 MINERALISED BANDED FOOTWALL BEDS

Interbedded garnet, pyroxene and minor biotite hornfels. The garnet hornfels beds contains abundant actinolite and calcite and have moderately to thickly disseminated scheelite.

Bedding is slightly disturbed (probably by boudinage) but averages 45° to core axis.

Fractures/m = 6

Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/2

84.00 - 90.30 BANDED FOOTWALL BEDS

Interbedded marble, pyroxene, biotite and garnet hornfels. Bedding is very disturbed and towards the end of the unit slight brecciation has occurred. Disturbance of bedding is accentuated by grossular garnet rimming of marble.

Minor scheelite is present in garnet hornfels between 88.2 - 89.2m.

Fractures/m = 4
Recovery = 100%

90.30 - 91.20 FAULT ZONE

Badly broken and brecciated core with many small calcite veinlets. Most fractures surfaces are coated with chlorite slickensides. Fragment size is generally less than 1cm.

This is the No. 2 fault.

91.20 - 96.50 BIOTITE HORNFELS

Purplish brown biotite hornfels with small beds of pyroxene hornfels, and rock fragments rimmed by pyroxene. Most fractures surfaces have thin iron-oxide coatings.

Core is mildly broken at the beginning of the unit (91.2 - 92.4m) and becomes more solid towards the end.

At 96.2m, bedding is 70° to core axis.

Fractures/m = 15-3
Recovery = 100%

96.50 - 113.80 PYROXENE-GARENT HORNFELS

Calcite pods, often rimmed by grossular are set in a matrix of pyroxene and biotite. The biotite-rich pyroxene-garnet hornfels is most common from 99.5 - 103.9m, and there is no scheelite is this interval.

99.6 - 99.7	Broken clayey core.
100.5m	Minor broken ocre
102.2 - 102.3	Clay seam
104.0 - 104.3	Sparsely disseminated scheelite with calcite/actinolite pods.
106.3 - 113.3	Andradite rich pyroxene-garnet hornfels with calcite/actinolite pods. Fine grained scheelite is thickly disseminated over parts of this unit: 106.4 - 106.5, 108.4 - 108.5, 108.9 - 110.9m, 112.1 - 113.8m.
103.5 - 103.7	Calcite vein

Fractures/m = 6
Recovery = 100%

GEOLOGY -- KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/2

113.80 - 120.10 MARBLE

White to light grey medium grained marble the lower boundary of which is gradational with banded footwall beds. Bedding is 70° to core axis.

Fractures/m = 9
Recovery =

120.10 - 143.70 BANDED FOOTWALL BEDS

Interbedded garnet and pyroxene hornfels with lesser amounts of marble and biotite hornfels. Fine grained disseminated scheelite is present is some of the garnet and garnet/pyroxene rich beds, and is noticable more abundant between 132.8 - 142.30m.

124.0 - 129.2	Red ironstaining is present on fracture surfaces and there are red clay seams at 125.0 - 126.0m (entirely lost) and 127 - 127.9m. Core between and around these seams is intensely broken.
140.2 - 142.3	Scheelite bearing sections of core start to resemble endoskarns (pyroxene-quartz-garnet rocks) and aplites with interbedded biotite hornfels. Scheelite ranges is size from very fine, to coarse grained where there is also coarse grained quartz present.
142.3 - 143.70	Biotite hornfels with interbedded pyroxene and minor marble. Fracture surfaces are mildly ironstained. Core between 143.6 - 143.7m is badly broken.

At 121.3 bedding is 68° to core axis.
133m 46°
135.3 67°
140.5 55°

Fractures/m = Av. 5
Recovery =

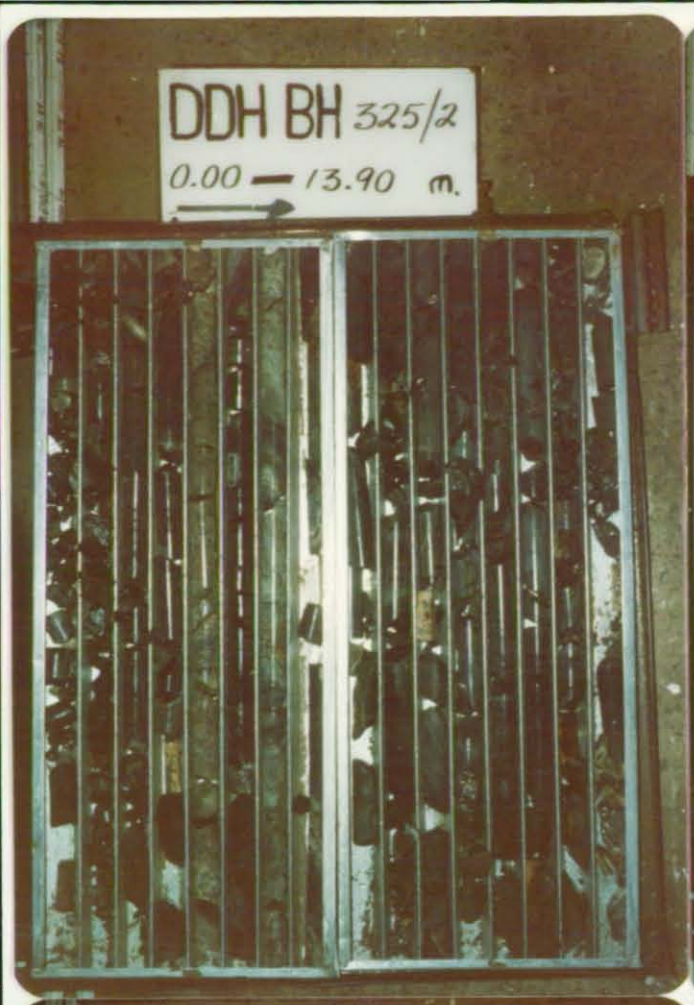
143.70 - 145.0m ADAMELLITE

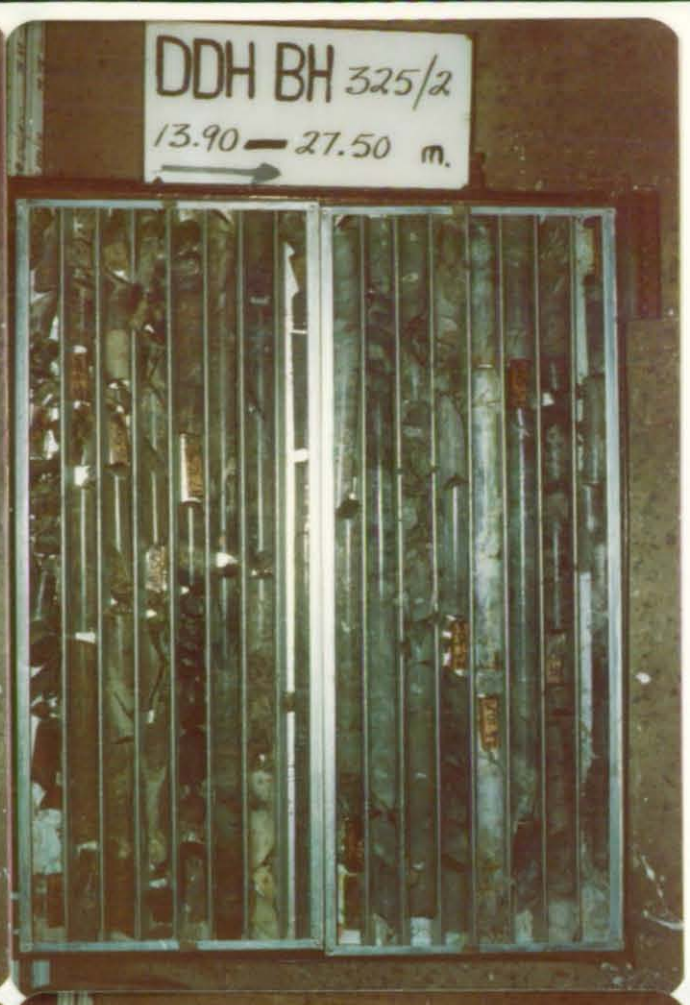
Medium grained adamellite conposed of quartz, feldspars, biotite and pyroxene. Some of the unit has a slight greenish colour and some fractures are ironstained. Minor fine to medium grained scheelite is present at 143.8m and 144.9. The unit has too much endoskarn appearance to be a typical adamellite.

Fractures/m = 15
Recovery = 90%

EOH 145.0m

Hole stopped because of caving from 125m and 143.7m.

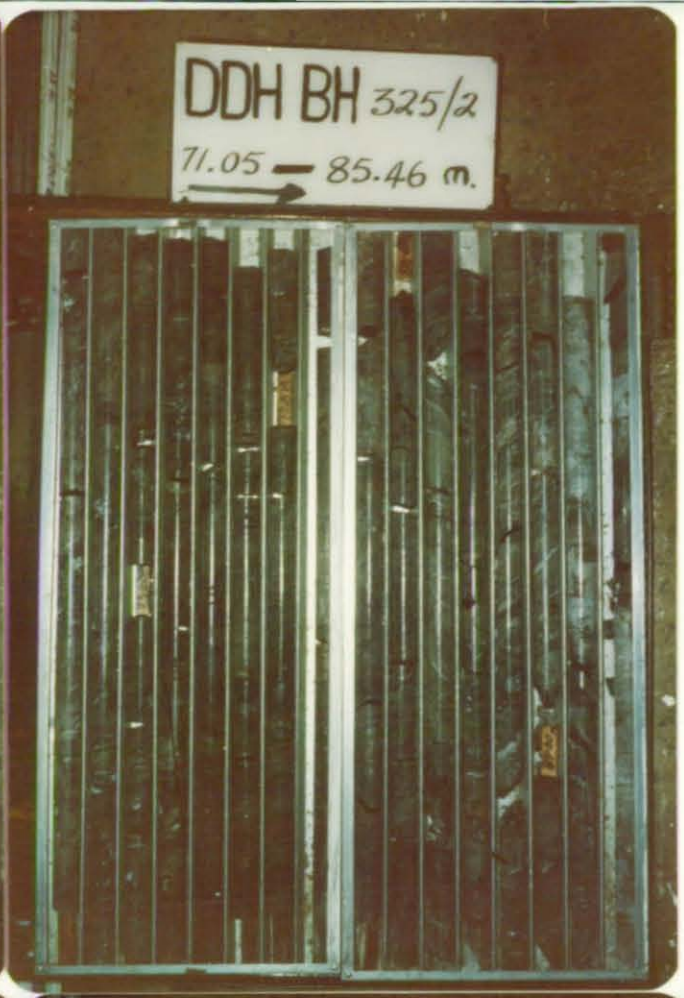

DDH BH 325/2
0.00 — 13.90 m.


DDH BH 325/2
13.90 — 27.50 m.

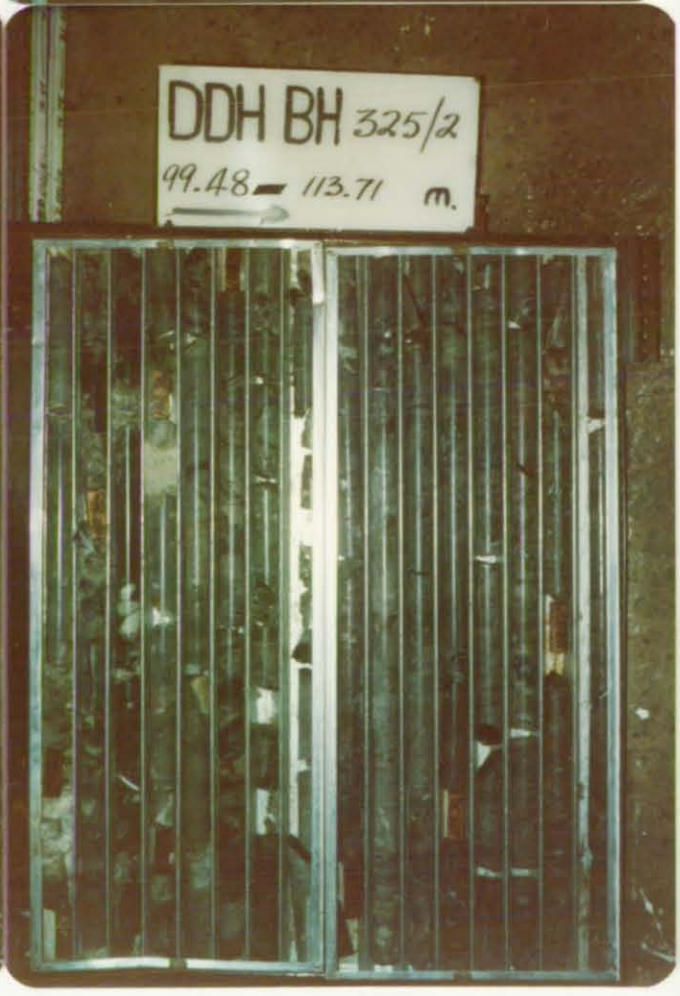

DDH BH 325/2
27.50 — 41.91 m.


DDH BH 325/2
41.91 — 56.48 m.


DDH BH 325/2
56.48 — 71.05 m.


DDH BH 325/2
71.05 — 85.46 m.


DDH BH 325/2
85.46 — 99.48 m.


DDH BH 325/2
99.48 — 113.71 m.


DDH BH 325/2
113.71 — 129.62 m.


DDH BH 325/2
129.62 — 137.00 m.

GEOLOGY - KING ISLAND SCHEELITE

LOG OF D.D.H. No. 325/1

PLANNING

PROPOSER: J. Clark DEPTH: 150

LOCATION: Q42 Drive

PURPOSE OF HOLE: To test Fault Block

CO-ORDS: 40385 E 10325 N

INCLINATION:

BEARING: 270° °GRID °MAG

TARGET: E N

SURVEY

SURVEY CO-ORDS: E N

SURVEYED BEARING: 270° 20' GRID °MAG

SURVEYED IN BY: DATE:

ACTUAL CO-ORDS: 40386.3 E 10325.1 N

R.L. OF COLLAR: 951.6

INCLINATION OF HOLE: -77°

PICKED UP BY: B. Lennon DATE: 5.4.79

SUMMARY

LOGGED BY: J. Clark

RESULTS: 54-57m, 3m @ 1.39% WO_3

77-80m, 3m @ 1.98% WO_3

DRILLING

DATE COMMENCED: 29/3/79 DATE TERMINATED: 16/5/79

DRILLER/CONTRACTOR: A.D.D.

CASING: SIZE:
DEPTH:

CORE: SIZE:
DEPTH:

WEDGE PLACED: DEPTH:

EXTENSION:

FINAL DEPTH: 80 m

REASON FOR TERMINATION: FAULT ZONE AT 74 m

CONDITION OF HOLE ON COMPLETION:

CASING:

CEMENTED:

BORE HOLE SURVEY:

WATER:

COMMENTS ON DRILLING CONDITIONS:

GEOLOGY - KING ISLAND SCHEELITE

CORE RECOVERY

D.D.H. No. BH 325/1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 0.9	0.9	0.7	78
0.9 - 2.9	2.0	2.0	100
2.9 - 5.1	2.2	2.2	100
5.1 - 6.1	1.0	1.0	100
6.1 - 8.0	1.9	1.9	100
8.0 - 9.5	1.5	1.5	100
9.5 - 12.6	3.1	3.1	100
12.6 - 16.1	3.5	3.5	100
16.1 - 18.1	2.0	2.0	100
18.1 - 21.1	3.0	3.0	100
21.1 - 24.0	2.9	2.9	100
24.0 - 27.1	3.1	3.1	100
27.1 - 30.1	3.0	2.9	97
30.1 - 33.1	3.0	3.0	100
33.1 - 36.1	3.0	3.0	100
36.1 - 39.1	3.0	3.0	100
39.1 - 42.1	3.0	3.0	100
42.1 - 45.1	3.0	3.0	100
45.1 - 48.1	3.0	3.0	100
48.1 - 53.1	5.0	4.9	98
53.1 - 56.1	3.0	3.0	100
56.1 - 59.1	3.0	3.0	100
59.1 - 62.1	3.0	3.0	100
62.1 - 65.1	3.0	3.0	100
65.1 - 68.1	3.0	3.0	100
68.1 - 71.1	3.0	3.0	100
71.1 - 74.1	3.0	3.0	100
74.1 - 75.1	1.0	1.0	100
75.1 - 80.0	4.9	4.7	96

GEOLOGY - KING ISLAND SCHEELITE

ASSAY DATA

D.D.H. No. BH 325/1

Sample No.	DEPTH (MEATRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
BH 6946	52	53	1.0	1.0	<0.01	<0.01		
47	53	54	"	"	<0.01	0.01		
48	54	55	"	"	0.50	0.03		
49	55	56	"	"	1.23	0.04		
50	56	57	"	"	2.45	0.07		
51	57	58	"	"	0.02	<0.01		
52	58	59	"	"	0.06	<0.01		
53	59	60	"	"	<0.01	0.01		
54	60	61	"	"	<0.01	0.01		
55	61	62	"	"	<0.01	0.02		
56	62	63	"	"	<0.01	0.02		
57	63	64	"	"	<0.01	0.02		
58	64	65	"	"	<0.01	0.01		
59	65	66	"	"	<0.01	0.01		
60	66	67	"	"	<0.01	0.01		
61	67	68	"	"	0.14	0.01		
62	68	69	"	"	<0.01	0.01		
63	69	70	"	"	<0.01	0.08		
64	70	71	"	"	0.01	0.03		
65	71	72	"	"	<0.01	0.01		
66	72	73	""	"	0.02	0.01		
67	73	74	"	"	0.01	0.02		
68	74	75	"	"	0.04	0.01		
69	75	76	"	"	0.02	<0.01		
70	76	77	"	"	0.25	0.01		
71	77	78	"	"	4.50	0.13		
72	78	79	"	"	1.63	0.04		
73	79	80	"	"	0.31	0.02		

SPECIFIC GRAVITY

Depth (metres);

Rock Type :

S.G. :

Determined by:

GEOLOGY - KING ISLAND SCHEELITE

SUMMARY BORE HOLE SURVEY DATA

D.D.H. No. BH 325/1

Survey method: Multishot
Final depth: 80.0
Casing depth: 6m

Depth surveyed to: 80.0
Date surveyed 16/5/79
Surveyed by: L. Denby
Checked by: J. Clark

Bearing			Inclination		True vertical Depth (m)	Co-ordinates	
Depth (m)	Grid	Mag.	Read	Corrected		N	W
25	272	244	12° 30'	-77.5°	24.41	0.19	5.41
43	272	244	12° 45'	-77.25°	41.97	0.33	9.38
58	272	244	13°	-77	56.59	0.45	12.76
70	275	247	12°45'	-77.25°	68.29	0.68	15.40
80	279	251	13° 15'	-76.75°	78.02	1.04	17.66

REMARKS:

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/1

0.0 - 16.20m BIOTITE HORNFELS

Dark purplish brown biotite hornfels with occasional green pyroxene hornfels beds.

0.0 - 4.3m White to light brown angular rock fragments are present in biotite hornfels matrix. Core is slightly broken at the start of this unit.

4.3 - 5.6m Medium grained white aplite with abundant biotite flakes.

5.6 - 9.0m Ironstaining is present along pyroxene and Marble beds. These are slightly disturbed but average 30^{o} to core axis.

11.05 - 12.6m Moderate spotting in biotite hornfels.

13.7 - 13.8m, 14.4 - 14.6 m Badly broken core with the first zone being a very poorly consolidated breccia.

Fractures/m = 10
Recovery = 100%

16.20 - 20.40m APLITE

Fine grained white to light pink aplite with slight ironstaining present towards the end of the unit.

Fractures/m = 12
Recovery = 100%

20.40 - 29.10m MARBLE

Generally a white, fine grained well bedded marble. Short intervals are rich in pyroxene.

20.4 - 20.6m Dark green pyroxene/calcite rock with minor andradite but no scheelite.

25.4 - 26.2m Green pyroxene/calcite hornfels with trace scheelite.

26.2 - 27.2m Biotite hornfels containing lighter coloured rock fragments.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/1

27.2 - 29.1m Pyroxene hornfels with poorly defined calcite ?fragments rimmed by grossular. A large calcite vein sub parallel to the core axis at 27.1 - 27.6m has caused minor broken core.

28.9 - 29.0m Broken core and recemented breccia. At 25.0m bedding is 55° to core axis.

Fractures/m = 6
Recovery = 100%

29.10 - 51.80m BIOTITE HORNFELS/PYROXENE HORNFELS

Brown biotite hornfels with variable amounts of interbedded green pyroxene hornfels.

34.4 - 34.5m Broken core.

34.7 - 35.0m Broken core. Biotite hornfels appears to have been moderaterly brecciated, and most fractures are coated with chlorite.

43.4 - 43.5m Broken core.

45.0 - 51.8m Podded biotite/pyroxene hornfels in which rock fragments and small calcite fragments rimmed by pyroxene are set in a biotite - rich matrix.

49.2 - 49.6m Broken core with calcite veining. All fracture surfaces are costed with chlorite.

50.7 - 50.8m Broken core.
At 37.0m bedding is 42° to core axis

Fractures/m = 4
Recovery = 100%

51.80 - ?73.10m PYROXENE - GARNET HORNFELS

Irregularly shaped, usually small calcite and calcite/amphibole fragments are present in a matrix of pyroxene with variable amounts of grossular and calcite. Scheelite is irregularly and sparsely distributed.

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/1

54.7 - 56.8m Fine grained scheelite is thickly disseminated in this section Andradite garnet is also abundant.

60.9 - 63.4m Podded biotite pyroxene hornfels in which small calcite fragments rimmed by pyroxene are present in a biotite rich matrix.

61.1, 63.6m Minor broken core along calcite/chlorite veins.

66.0 - 70.0m Minor ironstaining associated with some calcite veins. Broken core at 66.7m and 68.2m also appears to be associated with these veins. Calcite fragments are not as frequent as usual.

The base of this unit is very indistinct. At 73.10m there is a calcite/chlorite filled shear zone at 40° to the core axis and this is taken as the boundary of the unit.

Fractures/m = 4
Recovery = 100%

?73.10 - 76.95m FRAGMENTAL PYROXENE/CALCITE/GARNET ROCK

This unit is moderately weathered and in places badly broken. It appears to have a tectonic fragmental texture with rounded ?fragments of light brown grossular set in a matrix of pyroxene and dark green amphibole.

73.8 - 74.1m Broken core and clay zone which is probably causing the drilling problems of this hole. (End of barrel in core tray as could not remove core from it.) Broken core at the start of each run is due to rock falling down the hole from this interval.

74.3 - 74.4m Broken core caused by swelling calcite vein.

75.7 - 76.2m Broken core with recmented breccia. The matrix of the breccia is black.

76.7 - 77.0m Broken core, part of which are rubble. These scattered scheelite is present and between 75.3 - 75.4m there is thickly disseminated fine grained scheelite.

Fractures/m = 20
Recovery = 100%

GEOLOGY - KING ISLAND SCHEELITE

GEOLOGICAL LOG

D.D.H. No. BH 325/1

76.95 - 80.00m GARNET HORNFELS

This unit is moderately weathered especially at the beginning. It consists of garnet hornfels with short intervals of barren pyroxene - grossular rich hornfels towards the end of the unit.

76.95 - 78.5m Very thickly disseminated fine grained scheelite (>1% WO_3) in moderately weathered garnet hornfels. There is mildly broken core at 77.05 - 77.1m, but elsewhere the rubble present has fallen down the hole.

78.5 - 79.9m Pyroxene grossular hornfels some of which has a slightly podded texture and contains variable amounts of andradite is present which lengths of garnet hornfels that contain abundant fine grained scheelite.

79.9 - 80.0m Biotite hornfels which has a sharp boundary at 75° to core axis with the unit above. Slickensides are present on some fracture surfaces.

Fractures/m = 6
Recovery = 100%

EOH 80.0 m

Hole abandoned with plug as could not get through fault zone at 74m.

GEOLOGY - KING ISLAND SCHEELITE

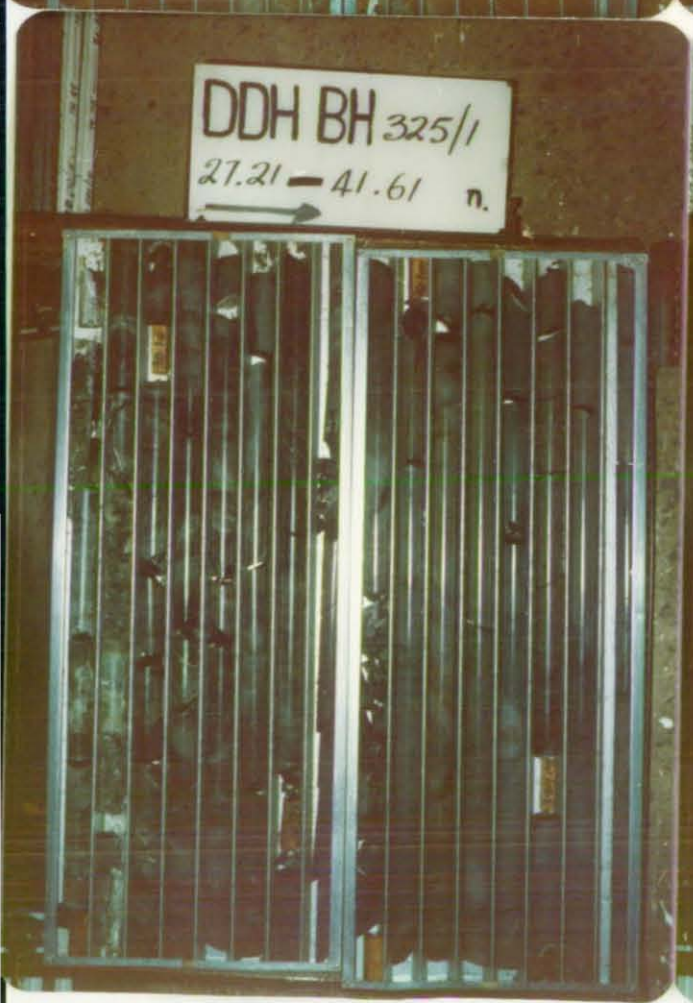
CHECK ASSAY DATA

D.D.H. No. BH 325/1

LAB.	K.I.S.		LAB.	K.I.S. CHECK		LAB.	AMDEL		LAB.	A.L.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	
6773	0.17	0.01	8189	0.51	<0.01	8190	0.590		8191	0.48		


DDH BH 325/1
0.00 — 13.56 m.


DDH BH 325/1
13.56 — 27.21 m.


DDH BH 325/1
27.21 — 41.61 m.


DDH BH 325/1
41.61 — 56.52 m.


DDH BH 325/1
56.52 — 70.97 m.


DDH BH 325/1
70.97 — 80.00 m.