N

S

D.D.H. MS.2. (Hill Site).

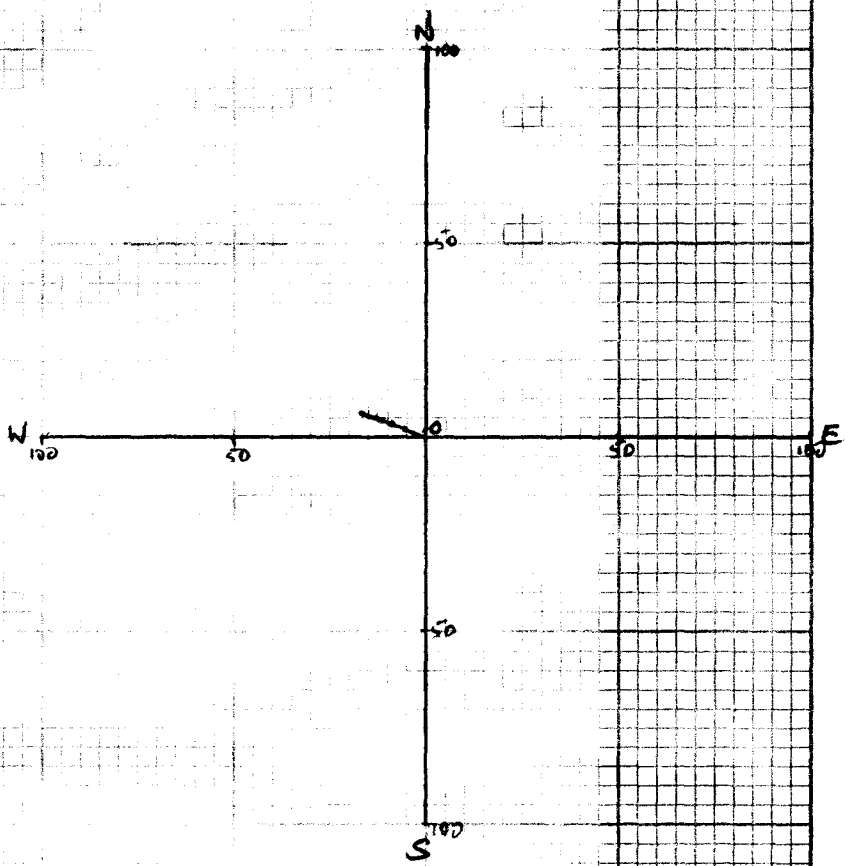
TOTAL DEPTH. 532'

DEPTH SURVEYED TO 525'

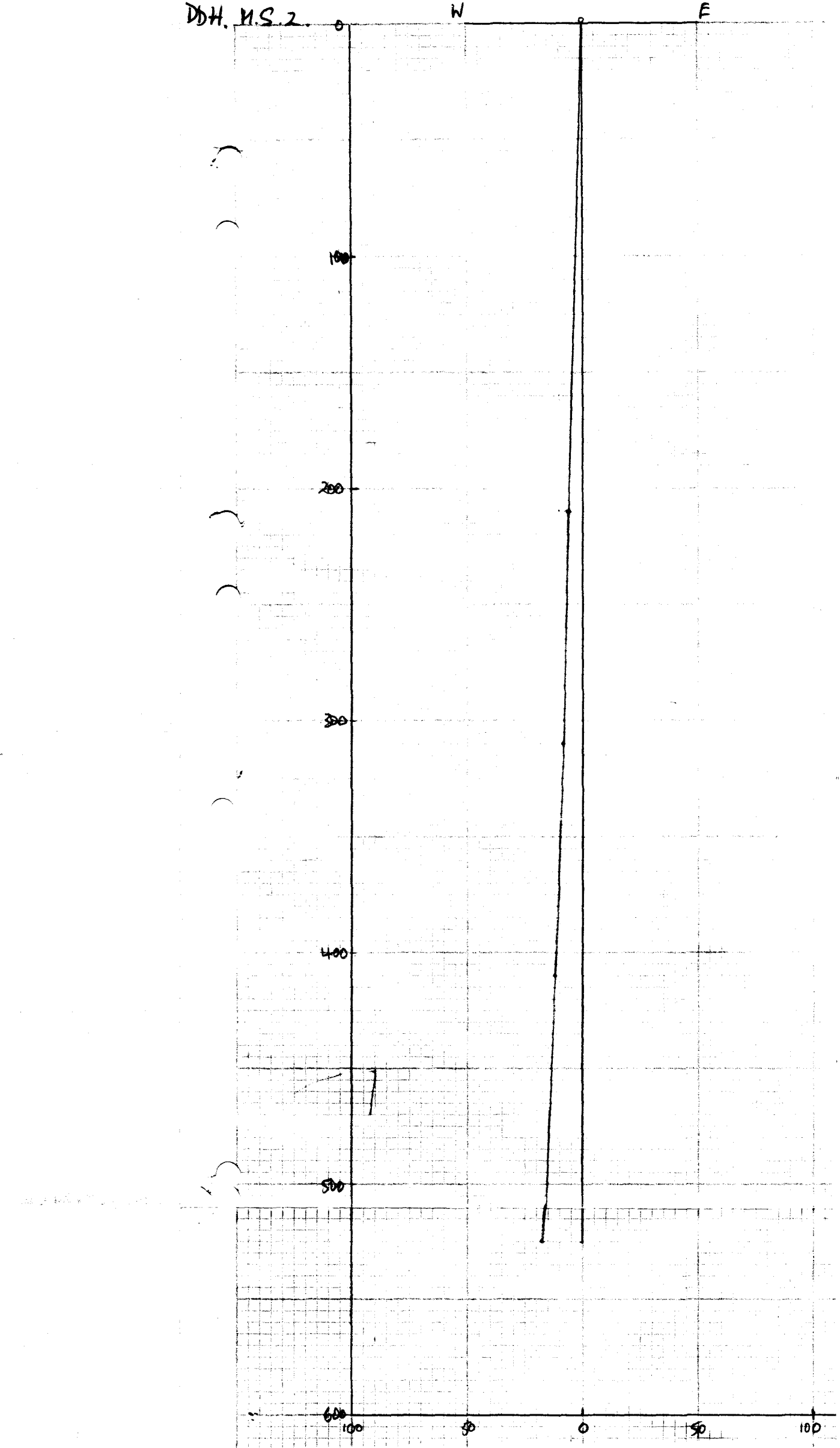
CASING DEPTH. 220'

DATE. 17/11/70.

SCALE 1" = 50'



50 0 50 100


DDH. M.S.2.
W
E
0
100
200
300
400
500
600
100
50
0
50
100

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. **Dolphin R.S. 19**

PLANNING

Proposer: **B. Grummit** Depth: **35m**

Location: **Main decline -173m R.L.**

Purpose of Hole: **Rock Mechanics**

Co-ordinates: **220 075** E **564 040** N
Inclination: **+90°** Magnetic:
Bearing Grid Target Depth:
Target: E N
Approved by: **K.I.S** Date:

SURVEY

Survey Co-ords: - E - N
Survey bearing: Grid Magnetic:
Surveyed in by: Date:
Actual Co-ords: **220 074.5** E **564 036.5** N
R.L. of Collar: **B- 169.1** Inclination of Hole: **Vertical**
Picked up by: **A.R.B** Date: **14/1/77**

SUMMARY

Logged by: **M. Danielson**
Results: **C lens, 10-28m 18m @ 1.46% WO_3**

DRILLING

Driller/Contractor: **A.D.D.**

Date commenced: **8/12/76** Date terminated: **15/12/76**

Casing:	Size:	**Nil**			
	Depth:				
Core:	Size:	**NQ**			
	Depth:	**34.0**			

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

Extension: **Nil**
Reason for termination: **Hole passed above zone of mineralisation.**
Condition of hole on completion: Final depth: **34.0m**
Casing:
Cemented: **Nil**
Bore hole survey: **No**
Water: **Surveyed to 33m**
Nil

Comments on drilling conditions: -

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. **DOLPHIN R.S. 19**

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 3.5	3.5	3.5	100
7.2	3.7	3.65	99
10.0	2.8	2.5	89
13.0	3.0	1.9	63
16.0	3.0	3.0	100
19.0	3.0	2.66	89
22.0	3.0	3.0	100
25.0	3.0	3.0	100
28.0	3.0	3.0	100
31.0	3.0	3.2	107
34.0	3.0	2.8	93
E.O.H.			

GEOPEKO LIMITED - ~~DOLPHIN~~

ASSAY DATA

D.D.H. No. ~~Dolphin R.S. 19~~

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 5323	10	11	1.0	0.6	0.76	0.01		
4	11	12	"	0.6	1.76	0.07		
5	12	13	"	0.6	0.52	0.02		
6	13	14	"	1.0	0.44	0.01		
7	14	15	"	"	1.30	0.06		
8	15	16	"	"	0.86	0.04		
9	16	17	"	"	0.59	0.02		
30	17	18	"	"	3.80	0.14	C lens 10-28m	
1	18	19	"	0.7	0.10	0.01	18m @ 1.46% WO_3	
2	19	20	"	1.0	1.24	0.04		
3	20	21	"	"	0.28	0.01		
4	21	22	"	"	1.48	0.06		
5	22	23	"	"	1.51	0.09		
6	23	24	"	"	2.24	0.08		
7	24	25	"	"	2.65	0.09		
8	25	26	"	"	1.80	0.07		
9	26	27	"	"	5.20	0.18		
40	27	28	"	"	1.08	0.03		
1	28	29	"	"	0.08	0.01		
D 5342	29	30	"	"	0.04	0.01		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. K.S 19

Survey method: Multishot Camera
Final depth : 34.0m
Casing depth : Nil

Depth surveyed to: 33m
Date surveyed: 15/12/76
Surveyed by : A. Taylor
Checked by : M.J.D.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected		S	W
3		214°		+87.8°	3.0		
15		217°		+87.5°	14.99		
33		216°		+87.5°	32.97	1.17	0.80

REMARKS:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. DOLPHIN R.S. 19

0 - 3.5	**BIOTITE PYROXENE HORNFELS** Thinly bedded, barren grey green hornfels. Bedding: 2m 67° L.A.O.C.
3.5 - 10.0	**BANDED FOOTWALL BEDS** Very weakly mineralised banded pyroxene, biotite, grossular hornfels, minor carbonate and minor mineralised andradite skarn developed. Bedding 6m 62° L.A.O.C. Below 8m core is very rubbly and there is significant core loss between 7.2 - 13.0m. This may be a fault zone.
10.0 - 18.5	**BANDED GARNET HORNFELS** Typical banded andradite garnet skarn with barren interbeds of mostly green ph and some minor black bh. Low to medium grade mineralisation. Bedding is at 16m 85° L.A.O.C.
18.5 - 20.5	**MARBLE MARKER** Barren mostly black bh, minor green ph and some grossular garnet. Bedding 20m 73° L.A.O.C.
20.5 - 28.0	**MASSIVE GARNET HORNFELS** Massive high grade andradite garnet hornfels. Core is broken between 27.5 - 28.0 but is probably due to contact zone.
28.0 - 34.0	**PYROXENE GARNET HORNFELS** Typical green ph with white carbonate pods rimmed with brown grossular garnet. No significant mineralisation.
34.0 E.O.H.	

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. ~~D~~R.S. 19

LAB.	K.I.S.		LAB.	K.I.S.		LAB. AMDEL			LAB. A.C.S.L.			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
D5324	1.76	0.07	D5586	1.61		D5587	1.61		D5588	0.49		
D5329	0.59	0.02	D5589	0.59		D5590	0.65		D5591	0.56		

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. DOLPHIN R.S. 18

PLANNING

Proposer: B. Grumitt — Depth: 35m

Location: Main decline - 165m R.L. (approx)

Purpose of hole: Rock Mechanics

Co-ordinates: 220 050 E 564 055 N
Inclination: + 90°
Bearing - Grid — Magnetic:
Target: E — Target Depth:
Approved by: K.I.S. — N
Date: 26/11/76

SURVEY

Survey Co-ords: E — N
Survey bearing: 88° 00' Grid — Magnetic:
Surveyed in by: — Date:
Actual Co-ords: 220 049.54 E 564 055.67 — N
R.L. of Collar: B - 161.31 — Inclination of Hole: 89° 00'
Picked up by: R.J.H — Date: 29/11/76

SUMMARY

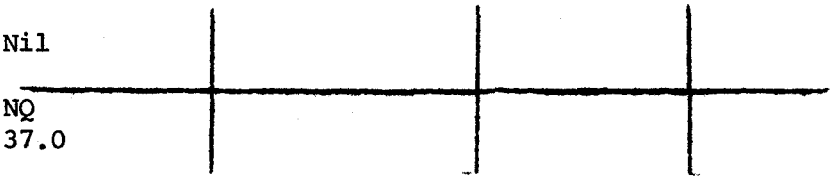
Logged by: M. Danielson
Results:

DRILLING

Driller/Contractor: A.D.D

Date commenced: 26/11/76 — Date terminated: 6/12/76

Casing: Size: Nil
Depth:
Core: Size: NQ
Depth: 37.0



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

Extension: Nil
Reason for termination: Hole passed into hangingwall biotite hornfels

Condition of hole on completion: — Final depth: 37.0m
Casing: Nil
Cemented: No
Bore hole survey: Camera to 36 m.
Water: Minor water inflow.

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. ~~K.S 10~~

Survey method: Multishot camera
Final depth : 37m
Casing depth : Nil

Depth surveyed to: 36m
Date surveyed: 6/12/76
Surveyed by : G.L.B
Checked by : -

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
6		269		~~88.5~~	6.0		
12		269		88.75	12.0		
21		266		88.75	21.0		
30		266		88.75	30.0		
36		267		89.0	36.0		

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. R.S. 18

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0 - 1.10	1.10	1.10	100
2.1	1.0	1.00	100
3.5	1.4	1.10	79
6.3	2.8	2.80	100
9.8	3.5	3.20	91
13.0	3.2	3.0	94
16.0	3.0	3.10	103
19.0	3.0	3.0	100
22.0	3.0	3.0	100
25.0	3.0	2.35	78
28.0	3.0	1.80	60
31.0	3.0	2.60	87
34.0	3.0	3.0	100
37.0	3.0	3.0	100

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. RS 18

0.0 - 5.1	**BANDED FOOTWALL BEDS** **Unmineralised thinly banded biotite, pyroxene, grossular garnet and minor carbonate hornfels.** **Bedding:** **3m 65 LAOC**
5.1 - 8.9	DYKE **Barren pale grey massive fine grained rock. Volcanic texture. Feldspar grains apparent and rock is probably a "lamprophyre" similar to dykes exposed in C12 (-150mRL). Minor banded bh/ph inlier at 7.2 - 7.9m.**
8.9 - 18.0	BANDED LOWER C LENS A banded andradite and **grossular garnet** skarn containing barren interbeds of banded bh/ph/gh. eg. 8.9 - 9.8 11.2 - 12.0 This banded Lower C lens unit is very weakly mineralised and would be mostly sub oregrade.
18.0 - 19.0	MARBLE MARKER Barren pale grey white carbonate.
19.0 - 31.0	UPPER C LENS Massive andradite garnet skarn medium to high grade mineralisation in good quality core to 25.0m. Between 25-26m core is very rubbly with weak mineralisation. Often appears as a carbonate recemented breccia. Between 26-31m core continues weakly mineralised and is moderatley broken and appears to have a higher ph content. Slickensides or broken core between 28.5 - 29.0m. Core loss between 22.0 - 31.0m 6.75m recovered. 75% core lost.
31.0 - 34.0	PYROXENE GARNET HORNFELS Not typical pgh but is a dominantly ph and grossular garnet rock containing minor carbonate. Very weak mineralisation. Unit becomes more bh rich towards top.
34.0 - 37.0	BIOTITE HORNFELS Moderately broken barren grey bh.
37.0m E.O.H	

GEOPEKO LIMITED - DOLPHIN

ASSAY DATA

D.D.H. No. ~~D R.S. 18~~

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
D 5399	9	10	1	1	<0.01	< 0.01		
400	10	11	1	1	0.21	< 0.01		
1	11	12	1	1	0.23	0.01		
2	12	13	1	1	0.03	< 0.01		
3	13	14	1	1	0.14	< 0.01		
4	14	15	1	1	0.14	< 0.01		
5	15	16	1	1	0.15	0.01		
6	16	17	1	1	0.31	0.01		
7	17	18	1	1	0.23	0.01		
8	18	19	1	1	0.19	0.01		
9	19	20	1	1	1.68	0.02		
10	20	21	1	1	1.52	0.02		
11	21	22	1	1	1.38	0.08		
12	22	23	1	1	1.27	0.05		
13	23	24	1	1	2.95	0.09		
14	24	25	1	0.4	1.33	0.08		
15	25	26	1	0.73	1.40	0.05		
16	26	27	1	0.74	0.95	0.04		
17	27	28	1	0.73	0.62	0.04		C lens 19 - 32m
18	28	29	1	1	1.49	0.05		
19	29	30	1	1	2.60	0.14		13m @ 1.39% WO_3
20	30	31	1	1	0.41	< 0.01		
21	31	32	1	1	0.54	0.01		
22	32	33	1	1	0.01	< 0.01		

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

CHECK ASSAY DATA

D.D.H. D) R.S. 18

LAB.	K.I.S.		LAB. K.I.S.			LAB. AMDEL			LAB. A.C.S.L.			
Original Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	Check Sample No.	WO_3	Mo	
D5401	0.23	0.01	D5577	0.16		D5578	0.30		D5579	0.28		
D5412	1.27	0.05	D5580	1.23		D5581	1.31		D5582	0.31		
D5420	0.41	0.01	D5583	0.44		D5584	0.52		D5585	0.77		

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D/CSIRO/6 Dolphin Mine

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220200 E Cuddy (P.18) B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220200 E 564190 N

Inclination: +50° Magnetic

Bearing: 360° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220199.7 E 564191.2 N

R.L. of collar: -70.7 Inclination of hole: 47°

Picked up by : R.J.H. Date: 12/5/75

SUMMARY

Logged by :M.J. Danielson.

Results: Medium grade desseminated scheelite 0 - 0.5m.

DRILLING

Driller/Contractor: A.D.D.

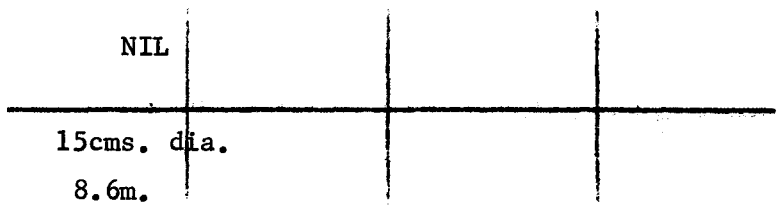
Date commenced: May, 1975 Date terminated: May, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms. dia.

Depth : 8.6m.



Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Hole attained required depth for stress measurement testing. Final depth: 8.6m.

Condition of hole on completion:

Casing : NIL

Cemented : No.

Bore hole survey: No.

Water: NIL

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D/CSIRO/6

0 - 8.6m	GARNET PYROXENE HORNFELS Fine grained grossular garnet and pyroxene rich skarn. Medium grade desseminated scheelite 0 - 0.5m. Carbonate recemented breccia at 3.4m.
8.6m E.O.H.	

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D/CSIRO/4 Dolphin Mine

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220200 E Cuddy (P.18), B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220200 E 564190 N

Inclination: -3° Magnetic

Bearing: 050° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220201.8 E 564191.3 N

R.L. of collar: -73.4 Inclination of hole:

Picked up by R.J.H. Date: 12/5/75

SUMMARY

Logged by : M.J. Danielson.

Results: Medium desseminated scheelite 0 - 1m.

DRILLING

Driller/Contractor: A.D.D.

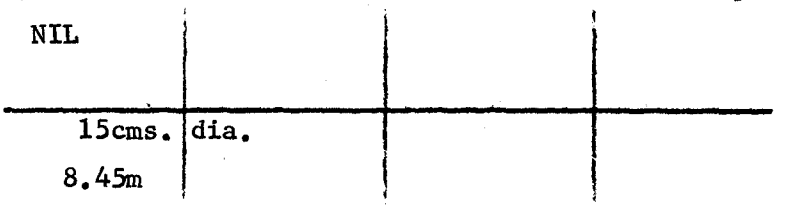
Date commenced: April, 1975. Date terminated: April, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms. dia.

Depth : 8.45m



Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Hole attained required depth for stress measurement & testing. Final depth:8.45m.

Condition of hole on completion:

Casing : Nil

Cemented : No.

Bore hole survey: No.

Water: NIL

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No.D/CSIRO/4 Dolphin Mine

0 - 3.0m GARNET PYROXENE HORNFELS

A fine grained grossular garnet and pyroxene rich skarn. Medium grade desseminated scheelite between 0 - 1m.

3.0 - 3.85m BIOTITE HORNFELS

Barren grey fine grained bh.

3.85m - 8.1m BANDED PYROXENE CALCITE HORNFELS

An interbedded pale green ph and grey ch rock with no mineralization.

Bedding: 5m 30° L.A.O.C.

8.1m - 8.45m GARNET PYROXENE HORNFELS

Barren fine grained grossular garnet and pyroxene skarn.

8.45m E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D/CSIRO/5 Dolphin Mine

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220200E Cuddy (P.18), B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220200 E 564190 N

Inclination: +35° Magnetic

Bearing: 050° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220201.8 E 564190.2 N

R.L. of collar: -71.8 Inclination of hole: 35°

Picked up by : R.J.H. Date:12/5/75

SUMMARY

Logged by : M.J. Danielson.

Results: Medium grade desseminated scheelite. 0 - 1.3m
2.2 - 3.3m.

DRILLING

Driller/Contractor: A.D.D.

Date commenced: April, 1975 Date terminated:April, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms. dia.

Depth : 8.60

Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Hole attained required depth for stress measurement testing Final depth: 8.6o m

Condition of hole on completion:

Casing : NIL

Cemented : NO

Bore hole survey: No

Water: Nil

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D/CSIRO/5

0 - 4.7m **GARNET PYROXENE HORNFELS**

A grossular garnet and pyroxene rich fine grained skarn.
1.3 - 2.1 grey marble.
Bedding: 1m 35° L.A.O.C.
Medium grade desseminated scheelite. 0 - 1.3m
2.2 - 3.3m.

4.7m - 8.6m **MARBLE**

Barren grey marble. Leached zone at 7.6m.

8.5m E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D/CSIRO/3 DOLPHIN MINE

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220180E (014) Cuddy B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220180 E 564100 N

Inclination: -3° Magnetic

Bearing: 220° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: 232° Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220177.5 E 564099.2 N

R.L. of collar: -76.2m Inclination of hole: $-3^{\circ}30'$

Picked up by : R.J.H. Date: 21/4/75

SUMMARY

Logged by : M.J. Danielson.

Results: Variable grade mineralization 0.9 - 2.8m.

DRILLING

Driller/Contractor: A.D.D.

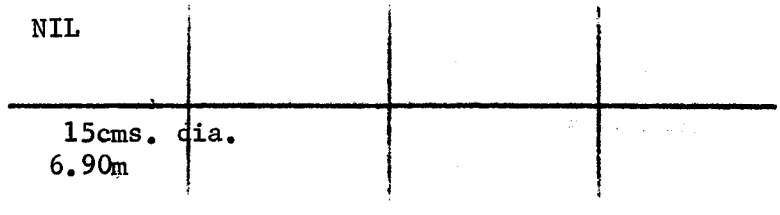
Date commenced: April, 1975. Date terminated: April, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms. dia.

Depth : 6.90m



Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Hole attained required depth for stress measurement & testing. Final depth: 6.90m

Condition of hole on completion:

Casing : Nil

Cemented : No

Bore hole survey: No.

Water: NIL.

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D/CSIRO/3

0 - 2.8m	PYROXENE HORNFELS Medium grained pyroxene rich weakly 'tuffite' appearance. Variable, mostly ore grade, desseminated scheelite, 0.9 - 2.8m
2.8m - 6.9m	BIOTITE PYROXENE HORNFELS Barren grey fine grained bh and very minor green ph.
6.9m E.O.H.	

GEOPEKO LIMITED - KING ISLAND

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

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220180E Cuddy (014), B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220180 E 564100 N

Inclination: -3° Magnetic

Bearing: 140° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: $146^{\circ}40'$ Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220182.5 E 564099.0 N

R.L. of collar: -76.4 Inclination of hole: $-4^{\circ}40'$

Picked up by : R.J.H. Date: 21/4/75

SUMMARY

Logged by : M.J. Danielson.

Results: Variable grade scheelite 3.2 - 8.2m.

DRILLING

Driller/Contractor: A.D.D.

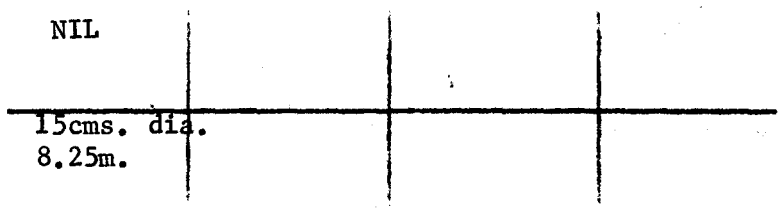
Date commenced: April, 1975 Date terminated: April, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms. dia.

Depth : 8.25m.



Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Hole attained required depth for stress measurement & testing. Final depth: 8.25m

Condition of hole on completion:

Casing : NIL

Cemented : No.

Bore hole survey: NO.

Water: NIL

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D/CSIRO/2

0 - 3.0m	PYROXENE HORNFELS
	Medium to coarse grained green rock. Weakly fragmental texture similar to 'tuffite'.
3.0m - 8.25m	GARNET PYROXENE HORNFELS
	Fine grained grossular garnet and pyroxene rich skarn.
	Variable grade scheelite between 3.2 - 8.2m. Not all ore grade but high grade 4 - 5m.
8.25m	E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. D/C.S.I.R.O./1 Dolphin Mine

PLANNING

Proposer: C.S.I.R.O. Depth:

Location: 220180E Cuddy (014), B lens drive, -75m R.L.

Purpose of hole: Rock mechanics research.

Co-ordinates: 220180 E 564100 N

Inclination: +35 Magnetic

Bearing: approx. 140° Grid Target depth:

Target: E N

Approved by: M. Baker. Date:

SURVEY

Survey Co-ords: E N

Survey bearing: 144°20' Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 220182.6 E 564098.9 N

R.L. of collar: -75.0 Inclination of hole: 34°10'

Picked up by : R.J.H. Date: 21/4/75

SUMMARY

Logged by : M.J. Danielson.

Results: Medium grade desseminated scheelite 2.25 - 3.40m.

DRILLING

Driller/Contractor: A.D.D.

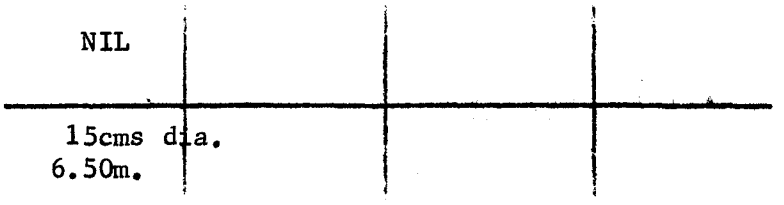
Date commenced: April, 1975. Date terminated: April, 1975.

Casing: Size : NIL

Depth :

Core: Size : 15cms dia.

Depth : 6.50m.



Wedge Runoff:

Wedge placed: NIL Depth:

Proposed by : Approved by:

Reason:

Extension: NIL

Reason for termination: Attained required length for stress measurement & testing. Final depth: 6.50m.

Condition of hole on completion:

Casing : NIL

Cemented : No.

Bore hole survey: No.

Water: No.

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. D/CSIRO/1

0 - 6.50m. GARNET PYROXENE HORNFELS

Fine grained grossular garnet and pyroxene rich skarn. Medium grade finely desseminated scheelite between 2.25 - 3.40m.

6.50m. E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. ~~E.I. 15~~/66 - 3

PLANNING

Proposer: **S. Grieve Brown** Depth: **300m**

Location: **Sarton's block**

Purpose of hole: **To test for presence of mine series rocks below volcanic cover.**

Co-ordinates: **217500** E **564675** N

Inclination: **-90°** Magnetic

Bearing: **-** Grid **-** Target depth:

Target: E N

Approved by: **M.C.Rogers** Date: **1/2/74**

SURVEY

Survey Co-ords: **217500** E **564675** N

Survey bearing: **-** Grid **-** Magnetic

Surveyed in by: Date:

Actual Co-ords: approx. E N

R.L. of collar: 217485.2 564678.7 Inclination of hole:

Picked up by : Date:

SUMMARY

Logged by : **S. Grieve Brown**

Results: **No mineralisation encountered**

DRILLING

Driller/Contractor: **A.D.D.**

Date commenced: **28/2/74** Date terminated: **9/3/74**

Casing: Size : **BX**

Depth : **155.14**

Core: Size : **BQ**

Depth : **281.0**

Wedge Runoff:

Wedge placed: **Nil** Depth:

Proposed by : Approved by:

Reason:

Extension: **Nil**

Reason for termination: **Entered granite** Final depth: **281.0m**

Condition of hole on completion:

Casing : **pulled**

Cemented : **no**

Bore hole survey: **Multishot**

Water: **Nil**

Comments on drilling conditions: **Moderate to bad, to 218.0m better but s not good below this depth.**

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. E.L. 15/66 - 3

Survey method: Multishot

Final depth : 281.00m

Casing depth : 180.00m

Depth surveyed to: 208m

Date surveyed: 21/10/76

Surveyed by : V.P.

Checked by : S.G.B.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
24.0		N60° 00'E	1°	89° 00'	24.00	0.21	0.36
48.0		N60° 00'E	1° 15'	88° 45'	47.99	0.47	0.81
72.0		N60° 00'E	2° 45'	87° 15'	71.96	1.05	1.81
102.0		N60° 00'E	4°	86° 00'	101.89	2.10	3.62
132.0		N60° 00'E	4° 07'	85° 53'	131.81	3.18	5.49
150.0		N60° 00'E	5°	-85° 00'	149.74	3.96	6.85
172.0		N60° 00'E	4° 15'	85° 45'	171.68	4.78	8.26
184.0		N60° 00'E	4° 15'	85° 45'	183.66	5.23	9.03
190.0		N60° 00'E	4° 30'	85° 30'	189.64	5.47	9.44
196.0		N60° 00'E	4° 30'	85° 30'	195.62	5.71	9.85
202.0		N65° 00'E	4° 15'	85° 45'	201.60	5.90	10.26
208.0		N62° 00'E	4° 00'	86° 00'	207.59	6.10	10.63

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. ~~K.L. 15/66~~ 3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 152.40	precollored		
154.53	2.13	1.50	70
155.07	0.54	0.51	94
155.50	0.43	0.10	23
157.66	2.16	2.32	107
160.73	3.13	3.09	99
163.78	3.05	3.04	100
165.10	1.32	1.13	86
166.72	1.62	1.83	113
169.16	2.44	2.42	99
169.46	0.30	0.25	83
171.44	1.98	1.95	98
172.82	1.38	0.68	49
173.43	0.61	0.56	92
173.71	0.28	0.30	107
175.13	1.42	1.68	118
175.87	0.74	0.28	38
176.66	0.79	0.77	97
178.92	2.26	1.80	80
181.81	2.89	2.79	97
182.42	0.61	0.47	77
183.79	1.35	1.34	99
184.25	0.46	0.41	89
184.86	0.61	0.63	103
187.99	3.13	3.14	100
191.10	3.11	3.04	98
191.41	0.31	0.24	77
192.63	1.22	1.22	100
193.85	1.22	1.21	99
194.77	0.92	0.80	87
195.53	0.76	0.70	92
196.75	1.22	1.16	95
197.92	1.17	1.20	103
198.81	0.89	0.77	87
199.24	0.43	0.15	35
201.98	2.74	2.46	90
203.30	1.32	0.91	69
204.52	1.22	1.18	97
205.31	0.79	0.92	116
106.27	0.96	0.57	59
207.49	1.22	0.91	75
207.80	0.31	0.27	87
209.40	1.60	1.08	68
209.85	0.45	0.12	27
212.45	2.60	2.42	93

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. E.L. 15/66 -3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
213.51	1.06	1.08	102
218.00	4.49	4.33	97
221.00	3.00	3.01	100
224.00	3.00	2.94	98
227.00	3.00	2.65	88
230.00	3.00	3.18	106
233,00	3.00	2.67	89
236.00	3.00	2.96	99
239.00	3.00	3.16	105
242.0	3.00	2.38	79
245.00	3.00	3.23	108
248.00	3.00	2.87	96
251.00	3.00	2.78	93
254.00	3.00	2.98	99
257.00	3.00	3.06	102
260.00	3.00	2.94	98
263.00	3.00	3.08	103
266.00	3.00	3.11	104
269.00	3.00	2.78	93
272.00	3.00	1.87	62
275.00	3.00	2.73	91
281.00	6.00	4.94	82
EOH			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. E.L. 15/66 - 3

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
				CORE NOT SPLIT				

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

E.L. 15/66 - 3

D.D.H. No.

0.0 - 152.40 PRECOLLARED

152.40 - 157.81 BIOTITE HORNFELS

This hornfels unit is similar to the biotite hornfels recorded in the mines. There are large amounts of sub rounded redrilled pebbles of volcanics in some of this area but these have fallen down into the drill hole from the percussion drill hole.

At 156.55m there are some small pyroxene bands at 56° LCA which probably reflect bedding.

157.81 - 158.23 PODDED PYROXENE HORNFELS

A small unit of dark green pyroxene hornfels with irregular pods of calcite present through out.

158.23 - 175.14 UPPER VOLCANICS

A greyish coloured finely crystalline unit with an irregular 'blotchy' appearance present through out.

The 'blotchy' appearance is due to irregular zones containing a higher mafic content.

Some small zones of finer grained grey material, possibly biotite quartz hornfels are present here, as follows:- 162.30 - 162.63m
171.44 - 173.74m

175.14 - 185.26 BIOTITE QUARTZ HORNFELS

This unit is essentially of fine grained grey black quartzite with very occasional bands of pyroxene rich material present in some areas. Three minor calcite bands with trace grossularite also occur in this unit, the largest of these is located between 184.05 - 184.25m. No scheelite is present in this unit.
Banding is at 44° LCA at 180.21m
57° LCA at 184.05m

185.26 - 190.81 VOLCANICS

A lighter green-grey unit of finely crystalline volcanics. These are fairly uniform and do not have the prominent blotchy appearance noted in the units of volcanics intersected above this depth.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. ~~K.I. 15/66~~ - 3

190.81 - 199/24 BIOTITE QUARTZ HORNFELS

This unit is grey black in colour and is similar in appearance to the quartzites encountered east of the Boundary fault at Bold Head.

The core in this unit is fairly heavily sheared and broken.

199.24 - 201.37 VOLCANICS

Grey green volcanics similar to those between 185.28 - 190.81m. Again this unit is quite broken and sheared especially over the last few centimeters.

201.37 - 203.30 BIOTITE QUARTZ HORNFELS

A very broken and sheared unit of biotite quartz hornfels with calcite present as infilling along the fractures.

203.30 - 223.10 VOLCANICS

The first two metres of this unit consists of extremely crushed and broken core and probably represents a fault zone: Calcite is present along some of the fractures.

The unit consists of a dark green spotted volcanic unit with large amounts of bracciated and crushed volcanics and clay present right throughout the unit suggesting proximity to a fault. Possibly a sub vertical fault.

The last 3 metres of this unit are especially weak and chloritized along the fractures.

223.10 - 226.39 MARBLE

A disturbed unit of banded grey brown marble with moderate amounts of grossularite present as fine bands.

The core is broken between 225.63 - 226.09m.
Banding is at 57° LCA at 223.60m
41° LCA at 226.35m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. E.L. 15/66 - 3

226.39 - 232.81m BANDED BIOTITE PYROXENE CALCITE HORNFELS

A well banded unit consisting of alternating bands of all three components. Initially the calcite bands form the majority of the core but these decrease in importance below 229.0m where they form perhaps at most 10% of the core.

Grossularite garnet is associated with the calcite bands between 226.39 and 229.0m and a very occasional fleck of scheelite is noticeable in this area.
Bedding is at 60° LCA at 226.67m
60° LCA at 228.50m
82° LCA at 231.50m

A small aplite is present between 229.18 - 229.42m.

232.91 - 234.43 APLITE

A small interval of fine grained aplite between 232.81 - 233.29 m there is a large fracture (? fault) sub parallel to the long core axis. This fracture has calcite and clinohumite infilling.

Water return was lost at 233.29m.

234.42 - 236.57m BANDED BIOTITE PYROXENE HORNFELS

This unit consists essentially of a finely banded biotite pyroxene hornfels with minor calcite bands present in it.

The core is extremely broken and weathered through out, the last metre containing large amounts of clay.

236.57 - 243.98 MARBLE

A grey-black barren marble unit. This unit shows original bedding but this is quite disturbed in some areas. The unit is barren of scheelite mineralisation.

Zones of crushed core probably indicative of faulting occur between 239.09 to 240.05 and 240.32 - 241.03m.

Fractures are apparent at 237.50m and 240.87m.
Bedding is at 60° LCA at 241.25
54° LCA at 243.8m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. ~~E.L. 15/66~~ - 3

243.98 - 249.36m BIOTITE PYROXENE HORNFELS

This unit is essentially a biotite hornfels with irregular bands of lighter grey green pyroxene hornfels present through out. As with almost all the core in this hole this unit is badly broken and weathered with a number of obvious fractures present as follows.
245.32 - at 20° LCA.
248.40m - at 38° LCA.

249.36 - 257.84 IMPURE MARBLE

This unit is essentially a marble unit with minor pelitic beds present in it.

Between 251.35m - 252.85m the marble unit contain large amounts of grossularite and lesser amounts of pyroxene. There is however no mineralisation associated with this unit.

Bedding is visible through out this unit, initially it is quite disturbed but below about 253.0m it becomes more regular.
Bedding is at 41° LCA at 251.0m
50° LCA at 254.30m
52° LCA at 257.10m
A zone of broken core possibly indicative of a fault occurs at 249.90m.

257.84 - 269.09 BANDED BIOTITE PYROXENE HORNFELS

A sequence of biotite and pyroxene hornfels bands with minor amounts of garnet and calcite present in the last three metres.

Right through out this unit there are breccia zone usually with calcite cement and it is possible that this hole has been drilled sub parallel to the fault recorded below. Leaching is apparent in the last 3 metres.

The unit is completely barren of scheelite mineralisation.
Bedding is at 65° LCA at 259.10m
51° LCA at 263.50m
49° LCA at 269.00m

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. ~~K.I. 15/66~~ 3

269.09 - 281.00m EOH

BRECCIATED QUARTZITES

This unit consists of extremely broken quartzites often recemented with clinohumite and minor calcite.

The cement is dominant over the quartzite fragments below about 277m so that the unit looks more like an angular conglomerate in some parts rather than quartzites.

The hole was abandoned at 281.00m since further progress would require extensive cementing.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. EL 16/66-2

PLANNING

Proposer: **S.G. Brown** Depth:

Location: **Tynan's Block**

Purpose of hole: **To test for presence of mine series below volcanics**

Co-ordinates: **214650** E **563900** N
Inclination: **-90°** Magnetic:
Bearing Grid Target Depth:
Target: E N
Approved by: **M.C. Rogers** Date: **9/11/73**

SURVEY

Survey Co-ords: **214650** E **563900** N
Survey bearing: Grid Magnetic:
Surveyed in by: **S.G. Brown** Date: **28/11/73**
Actual Co-ords: **214 651.54** E **563 903.56** N
R.L. of Collar: Inclination of Hole: **-90°**
Picked up by: **J. Cook** Date:

SUMMARY

Logged by: **S.G. Brown**
Results: **Trace scheelite near granite contact.**
N.B. precollared to 155.4m as PDH 51.

DRILLING

Driller/Contractor: **A.D.D.**

Date commenced: **28/11/73** Date terminated: **14/12/73**

Casing:	Size:	**BX**			
	Depth:	**157.58**			
Core:	Size:	**BQ**			
	Depth:	**250.74**			

Wedge Runoff:
Wedge placed: **Nil** Depth:
Proposed by: Approved by:
Reason:
Extension: **NIL**
Reason for termination:

Condition of hole on completion: Final depth: **250.74**
Casing: **Left in**
Cemented: **No**
Bore hole survey: **Multishot camera**
Water: **Nil**

Comments on drilling conditions: **Moderate.**

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. ~~EL 15/66-2~~ precollared to 206·18m

155.44 - 157.78 **BIOTITE HORNFELS**

A brown purple biotite hornfels with very minor thin bands of pyroxene rich rock present in it.
Bedding is at 80° LCA at 157.45m.

157.78 - 169.41 **BANDED BIOTITE PYROXENE CALCITE HORNFELS**

This is a finely banded unit consisting of alternating pelitic and calcareous horizons. Some minor garnet bands occur usually at the contacts of the calcite bands.
from 157.78 - 163.25 the amounts of calcite pyroxene and garnet bands is approximately equal but below 163.25m the calcite dominates.
Bedding is at 77° LCA at 160.5m
68° LCA at 164.5m
This unit is unmineralised.

169.41 - 174.65 **PYROXENE HORNFELS**

A fine grained light grey green pyroxene rich hornfels with lesser fine bands of brown purple biotite hornfels present throughout.
Some minor calcite bands are present between 171.0m - 171.32m.
Bedding at 171.0m is at 77° LCA.

174.65 - 180.47 **APLITE**

A fine grained grey pink aplite with minor white feldspars and trace biotite. Some small xenoliths of mine series rocks are present in it as at 179.06m.

180.47 - 182.60 **BANDED PYROXENE CALCITE HORNFELS**

A finely banded unit initially consisting of alternate bands of calcite and pyroxene rich sediment. Some minor biotite bands are also present throughout this unit.
The last 7cm of this unit are badly crushed and broken.
Bedding is at 71° LCA at 181.50m.

182.60 - 183.49 **FAULT ZONE**

This unit consists mainly of very crushed and broken aplite with the feldspar showing signs of having altered in part to Kaolin.
The last 20cm of this zone consists of sheared ? biotite hornfels. The lower contact is at 10° LCA.

183.49 - 186.66 **MARBLE**

A dark grey finely banded recrystalised marble. This unit is completely unaltered with no garnet or pyroxene present in it. Bedding is at 78° LCA at 185.6m.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. EL 15/66-2

186.66 - 187.58 **PODDED BIOTITE HORNFELS**

A small unit of fine grained brown purple biotite hornfels with irregular fragments and pods of pyroxene rich material present throughout.

187.58 - 190.32 **PYROXENE GARNET CALCITE HORNFELS**

Initially this disturbed unit contains garnet pyroxene and calcite rich material in almost equal amounts, but below 189.40 pyroxene is dominant and only minor garnet is present.

This unit is barren of scheelite mineralisation.

190.32 - 190.73 **BIOTITE HORNFELS**

A small unit of slightly disturbed biotite hornfels with minor bands of pyroxene present in it.

190.73 - 196.32 **PYROXENE GARNET CALCITE HORNFELS**

Similar to the upper part of the zone 186.66 - 190.32 and again unmineralised.

The last 70cm are very broken and puggy possibly due to a minor fault.

196.32 - 203.18 **BIOTITE HORNFELS**

A finely banded unit of brown purple biotite hornfels with minor thin bands of light grey green pyroxene hornfels present throughout.

A small 7 cm aplite dyke is present between 198.91 - 198.98.

Bedding is at 66° LCA at 198.80m
61° LCA at 201.50m

203.18 - 103.76 PYROXENE GARNET HORNFELS

A disturbed podded unit of pyroxene garnet skarn with lesser amounts of calcite present as pods. No scheelite is present in this unit.

203.76 - 207.77 BIOTITE HORNFELS

A very fine grained brown - purple biotite hornfels with very occasional fine bands of pyroxene hornfels present throughout especially over the last 1.5m where some very minor garnet calcite bands occur.

Bedding is at 69° LCA at 206.8m.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. EL 15/66-2

207.77 - 209.45 **PODDED PYROXENE CALCITE HORNFELS**

This unit consists of a grey fine grained pyroxene rich matrix with irregular pods of coarsely crystalline calcite present throughout. Some minor garnet is present round the rims of some of the calcite pods.

209.45 - 215.84 **BIOTITE HORNFELS**

A fine grained biotite hornfels brown - purple in colour with quite large amounts of greyish green pyroxene hornfels present as irregular bands throughout. Some lesser amounts of calcite and garnet are present in the larger pyroxene bands.

bedding is at 71° LCA at 112.5m.

215.84 - 218.74 **BIOTITE PYROXENE CALCITE GARNET HORNFELS**

A finely banded unit initially rich in biotite but this decreases in importance to 217.06m after which it is only present in very minor amounts.

The banding is irregular and in some cases the garnets appear to grow across the boundaries between the bands.

Bedding is at 71° LCA at 217.0m.

218.74 - 232.55 **BIOTITE PYROXENE HORNFELS**

Essentially this is a finely banded unit of biotite pyroxene hornfels with irregular areas of garnet and calcite enrichment as follows:

219.43 - 219.89 a small band of disturbed, podded pyroxene garnet hornfels

220.33 - 221.37 a banded unit of biotite pyroxene calcite hornfels with irregular amounts of garnet present at the contacts of the disrupted calcite horizons.

226.61 - 227.51 disturbed pyroxene garnet hornfels with minor calcite.

227.99 - 232.55 banded biotite pyroxene garnet hornfels with minor scheelite.

A calcite filled fault occurs between 227.82 and 227.99m.

A small aplite is present between 228.77 and 229.58.

bedding is at 74° LCA at 220.00m
73° LCA at 224.50m
76° LCA at 229.90m

It should be noted that the contacts of the pyroxene garnet rich zones cut completely across bedding without actually disrupting it in a replacement type of phenomenon.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. EL 15/66-2

232.55 - 250.74 **GRASSY GRANITE**

Typical Grassy granite with high mafic (biotite) content and large pink feldspar phenocrysts.

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. ~~E.I. 15/66~~ 2

Survey method: Multishot
Final depth : 250.55m
Casing depth : 155.45m

Depth surveyed to: 243.84
Date surveyed: 14/12/70
Surveyed by : V.P.
Checked by : P.V.

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
12.19			1° 15'	88° 45'	12.19		
24.38			1° 15'	88° 45'	24.37		
36.58			1° 22'	88° 38'	36.56		
48.77			2° 15'	87° 45'	48.74		
60.96			2° 30'	87° 30'	60.92		
73.15			2° 45'	87° 15'	73.10		
85.34			3° 15'	86° 45'	85.28		
97.54			3° 07'	86° 53'	97.45		
109.73			3° 22'	86° 38'	109.62		
121.92			3° 30'	86° 30'	121.78		
134.11			3° 22'	86° 38'	133.95		
146.30			3° 30'	86° 30'	146.12		
158.50	160° 00'	S30° oo'E	2° 00'	88° 00'	158.29	3.95	2.28
170.69	159° 00'	S29° 00'E	1° 45'	88° 15'	170.48	4.26	2.47
182.88	161° 30'	S31° 30'E	1° 45'	88° 15'	182.67	4.59	2.66
195.07	159° 00'	S29° 00'E	2° 00'	88° 00'	194.85	4.93	2.88
207.26	161° 00'	S21° 00'E	2° 45'	87° 15'	207.03	5.42	3.09
219.46	157° 30'	S17° 30'E	2° 52'	87° 08'	219.21	6.00	3.29
231.65	162° 00'	S22° 00'E	3° 00'	87° 00'	231.38	6.59	3.54
243.84	163° 00'	S23° oo'E	3° 15'	86° 45'	243.55	7.23	3.79
250.55	163° 00'	S23° 00'E	3° 15'	86° 45'	250.25	7.58	3.98

REMARKS:

Predrilled as percussion hole to 155.45m.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. NO. EL 15/66 - 1

PLANNING

Proposer: S.G. Brown

Depth:

Location: Sartoris block

Purpose of hole: To test for mine series rock beneath the upper volcanics.

Co-ordinates: 217100 E 564450 N

Inclination: Magnetic:

Bearing Grid Target Depth:

Target: E N

Approved by: M.C. Rogers Date: 3/11/75

SURVEY

Survey Co-ords: 217115 E 564470 N

Survey bearing: Grid Magnetic:

Surveyed in by: S.G.B. Date:

Actual Co-ords: 217114.20 E 564470.43 N

R.L. of Collar: Inclination of Hole: -90°

Picked up by: J. Cook Date: 3/2/75

SUMMARY

Logged by: S.G. Brown

Results: Precollared to 158.88m as PDH 48

DRILLING

Driller/Contractor: A.D.D.

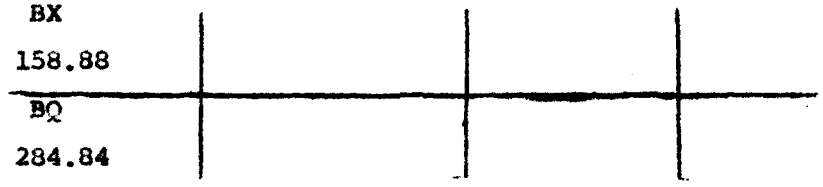
Date commenced: 13/11/75 Date terminated: 28/11/75

Casing: Size: BX

Depth: 158.88

Core: Size: BQ

Depth: 284.84



Wedge Runoff: Nil

Wedge placed: Depth:

Proposed by: Approved by:

Reason:

Extension: Nil

Reason for termination: In granite

Condition of hole on completion: Final depth: 284.84

Casing: Pulled

Cemented: No

Bore hole survey: Multishot camera

Water: Nil

Comments on drilling conditions: Moderate to good.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. EL 15/66-1

158.88 - 162.46	UPPER VOLCANICS A grey green crystalline volcanic with well developed spotted appearance, a typical upper volcanic rock. Towards 161.0m the volcanics have a distinctly splotchy appearance similar to that recorded in DDH INV 18/1.
162.46 - 164.97	QUARTZ FELSPAR PORPHYRY A fine grained black purple siliceous rock with well developed laths of white felspar present throughout.
164.97 - 216.10	UPPER VOLCANICS A series of medium grey green coloured volcanics with in some areas the splotchy appearance noted above. This appearance is due to sub rounded fragments which appear to have undergone plastic deformation. The unit appears to be fairly uniform and does not appear to have any units bedded pelitic sediments as occur in the western contact area. A number of faults are apparant in this unit noticeably at 205.13m, where calcite is present in the fault zone, and at 214.20m.
216.10 - 216.31	APLITE A very small band of aplite very weathered and soft, the felspar appears to have gone to kaolin.
216.31 - 235.89	UPPER VOLCANICS These rocks are similar to those above but in this area appear to be much more sheared and broken than normal. The shearing increases down the hole to the contact with the granite at 235.89.
235.89 - 240.11	GRANITE A small tongue of typical Grassy granite intruding the upper volcanics. The last 30cm of this unit are very quartz rich.
240.11 - 259.52	UPPER VOLCANICS This unit of upper volcanics is much finer grained in appearance and while retaining the overall spotted appearance does not show the same texture as the units above. Between 253.0m - 255.60m the core is extremely broken and sheared below 255.60m the volcanics become lighter grey green in colour.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. EL 15/66-1

259.52 - 266.46 **MINE SERIES**

The core appears to be mine series rocks, consisting of biotite hornfels with minor pods of pyroxene garnet containing very minor scheelite. A small tongue of granite is present between 264.94 - 265.59m.

266.46 - 284.84 **GRASSY GRANITE**

This unit is not uniform as it contains zones of increased silica and also of increased mafics, but on the whole is normal Grassy Granite.

284.84 E.O.H.

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. CH 1/5

PLANNING

Proposer: N.F. Morwood — Depth: 36m

Location: Main Decline

Purpose of hole: For electrical cable

Co-ordinates: 40459.5 E 10475 N

Inclination: -43° Magnetic

Bearing: Grid Target depth:

Target: E N

Approved by: Date:

SURVEY

Survey Co-ords: E N

Survey bearing: 267° 41' Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 40459.43 E 10 475.63 N

R.L. of collar: 965.51 Inclination of hole: -42° 31'

Picked up by : A. Grigulis Date: 8/7/77

SUMMARY

Logged by : S.G. Brown

Results: Quartzites

DRILLING

Driller/Contractor: K.I.S.

Date commenced: 28/6/77 Date terminated: 4/7/77

Casing: Size : -

Depth : -

Core: Size : E17

Depth : 34.0

Wedge Runoff:

Wedge placed: - Depth:

Proposed by : Approved by:

Reason:

Extension:

Reason for termination: Intersected decline Final depth: 34.0m

Condition of hole on completion:

Casing : No

Cemented : No

Bore hole survey: No

Water: No

Comments on drilling conditions: Good

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. CH / 3

Survey method: Not surveyed

Final depth :

Casing depth :

Depth surveyed to:

Date surveyed:

Surveyed by :

Checked by :

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
		Hole not surveyed picked up at both ends					

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. CH / 3

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.50	2.50	2.43	97
5.50	3.00	3.01	100
7.30	1.80	1.87	104
9.30	2.00	1.90	95
12.0	2.70	2.72	101
14.0	2.0	2.10	105
17.0	3.0	2.99	100
20.0	3.0	2.99	100
22.30	2.30	2.25	98
25.70	3.40	3.35	99
28.80	3.10	3.08	99
31.80	3.00	3.07	102
EOH 34.0	2.20	2.06	94

GEOPEKO LIMITED - ~~KING ISLAND~~

ASSAY DATA

D.D.H. No. ~~CH / 3~~

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
				HOLE NOT SPLIT				

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

CH / 3

D.D.H. No.

0.0 - 34.0m EOH

QUARTZITE SEQUENCE

A sequence of light grey quartzites with minor irregular patches of darker grey siltstones.

Pyrite is usually present in the siltstone units.

Spotting is apparant through out the quartzites.

A small aplite sill is present between 22.85 - 22.97.

GEOPEKO LIMITED - KING ISLAND

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

PLANNING

Proposer: N.F. Morwood

Location: Main decline

Depth:

Purpose of hole: For electric cable

Co-ordinates: 40459.5 E 10475.5 N

Inclination: -43°

Bearing: Grid Magnetic

Target depth:

Target: E N

Approved by: Date:

SURVEY

Survey Co-ords: E N

Survey bearing: Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: 40 459.57 E 10 475.74 N

R.L. of collar: 965.45

Inclination of hole:

Picked up by : A. Grigulis

Date: 8/7/77

SUMMARY

Logged by : S. G. Brown

Results: 40 435.05E 10 475.62N R.L. 942.02

DRILLING

Driller/Contractor: K.I.S.

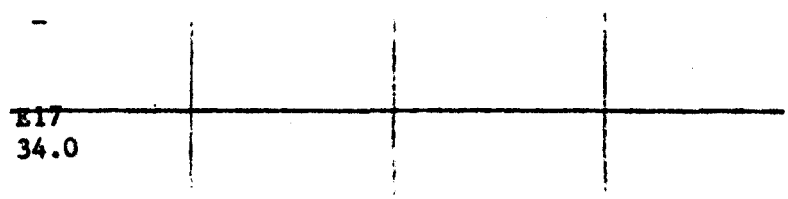
Date commenced: 24/6/77 Date terminated: 26/6/77

Casing: Size : -

Depth :

Core: Size : EI7

Depth : 34.0



Wedge Runoff: Nil

Wedge placed: Depth:

Proposed by : Approved by:

Reason:

Extension: None

Reason for termination: Intersected decline Final depth: 34.0

Condition of hole on completion:

Casing : -

Cemented : -

Bore hole survey:

Water: Good

Comments on drilling conditions:

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. CH/2

Survey method: Not surveyed

Final depth :

Casing depth :

Depth surveyed to:

Date surveyed:

Surveyed by :

Checked by :

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
			HOLE PICKED UP AT BOTH ENDS				

REMARKS:

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No. CH/2

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
				HOLE NOT SPLIT				

SPECIFIC GRAVITY

Determined by:

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

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. ~~CH/2~~

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 1.90	1.90	1.83	96
5.40	3.50	3.51	100
7.50	2.10	2.09	100
9.50	2.00	2.07	103
14.10	4.60	4.41	96
17.10	3.00	3.07	102
20.10	3.00	3.00	100
23.20	3.10	3.05	98
26.20	3.00	2.93	98
28.50	2.30	2.23	97
34.00	5.50	5.54	101

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No.

CH/2

q
0.00 - 34.00
EOH

QUARTZITE SEQUENCE

This sequence consists essentially of light grey quartzites and irregular zones of darker grey siltstones.

The quartzites have a well developed spotted texture which is most prominent between 2.50m - 11.0m

In this hole bedding is apparant in a few areas.
28° LCA at 5.30m
17° LCA at 12.20m

Pyrite is commonly found in the siltstone areas as small irregular veinlets.

Minor faults occur at 25.04 and 26.01m at approximately 90° LCA.

GEOPEKO LIMITED - KING ISLAND

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

PLANNING

Proposer: **N.F. Morwood** Depth: **37.5m**

Location: **Main Decline**

Purpose of hole: **For Electric Cable**

Co-ordinates: **40459.5** E **10475** N

Inclination: **-36°** Magnetic

Bearing: Grid Target depth:

Target: E N

Approved by: Date:

SURVEY

Survey Co-ords: E N

Survey bearing: Grid Magnetic

Surveyed in by: Date:

Actual Co-ords: **40459.53** E **10474.41** N

R.L. of collar: **965.51** Inclination of hole: **-**

Picked up by : **A. Grigulis** Date: **8/7/77**

SUMMARY

Logged by : **S.G. Brown**

Results: **40 434.52E 10 457.63N R.L. 943.61 break through**

DRILLING

Driller/Contractor: **K.I.S.**

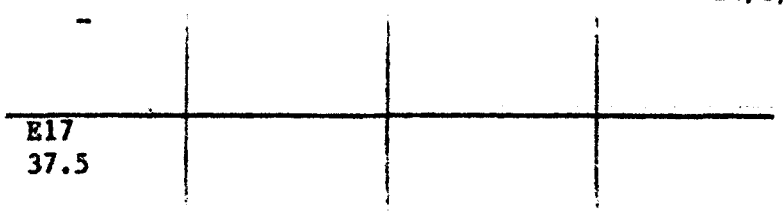
Date commenced: **20/6/77** Date terminated: **24/6/77**

Casing: Size : -

Depth :

Core: Size : **E17**

Depth : **37.5**



Wedge Runoff:

Wedge placed: **Nil** Depth:

Proposed by : Approved by:

Reason:

Extension: **No**

Reason for termination: **Intersected decline** Final depth: **37.5**

Condition of hole on completion:

Casing : **Nil**

Cemented : **No**

Bore hole survey: **No**

Water: **No**

Comments on drilling conditions: **Good**

GEOPEKO LIMITED - KING ISLAND

SUMMARY BORE HOLE SURVEY DATA

D.D.H No. GK/1

Not Surveyed

Survey method:

Final depth :

Casing depth :

Depth surveyed to:

Date surveyed:

Surveyed by :

Checked by :

Depth (m)	Bearing		Inclination		True vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corrected			
	Not Surveyed		**Hole picked up at both ends**				

REMARKS:

GEOPEKO LIMITED - KING ISLAND

CORE RECOVERY

D.D.H. No. CH 1

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 3.20	3.20	3.01	94
5.90	2.70	2.69	100
8.90	3.00	3.05	102
12.20	3.30	3.16	96
15.20	3.00	2.90	97
17.20	2.00	1.94	97
20.0	2.80	2.94	105
23.0	3.00	2.86	95
26.0	3.0	3.08	103
29.0	3.0	3.04	101
31.8	2.8	2.83	101
34.8	3.0	2.95	98
37.5	2.7	2.75	102
E.O.H.			

GEOPEKO LIMITED - KING ISLAND

ASSAY DATA

D.D.H. No: CH/1

Sample No.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Recovered	WO_3	Mo		
				HOLE NOT SPLIT				

SPECIFIC GRAVITY

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

Determined by:

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. CH 1

0.00 - 37.50
E.O.H.

QUARTZITES

A sequence of lightish grey spotted quartzites with irregular bands and patches of dark grey-black silstone.

The siltstone areas appear to occur as irregular 'rafts' throughout the quartzite unit and it is doubtful if any of the apparent banding in this core actually reflects bedding. It is possible that even the alignment of the pyrites is along a secondary foliation rather than true bedding as has been interpreted in the drive mapping.

There is a distinct increase in the spotting down the hole which in this case is getting closer to the Boundary Fault.

Some very minor molybdenum is present along joint planes close to the end of the hole.

Small clinohumite filled faults occur as follows:-

4.05m @ 45° LCA
11.87m @ 27° LCA
16.81m @ 25° LCA
17.05m @ 60° LCA
17.36m @ 36° LCA
17.94m @ 27° LCA
19.61m @ 57° LCA

GEOPEKO LIMITED - KING ISLAND

LOG OF D.D.H. No. ~~MAG. AN.~~ No.7

PLANNING

Proposer: S.G. Brown — Depth: 70m.

Location: Maf An No. 7 Red Hut Beach.

Purpose of hole: To test source of Magnetic Anomely.

Co-ordinates: E 213500 N 559060

Declination: Vertical — Magnetic

Bearing: Grid — Target depth:

Target: E N

Approved by: — Date:

SURVEY

Survey Co-ords: M.C. Rogers. E 213500 N 559060 — 1.8.74

Survey bearing: Grid — Magnetic

Surveyed in by: S.G.B. — Date:

Actual Co-ords: E 213500 N 559060

R.L. of collar: — Inclination of hole: -90°.

Picked up by : — Date:

SUMMARY

Logged by : S.G. Brown.

Results: Volcanic throughout.

DRILLING

Driller/Contractor: A.D.D.

Date commenced: — Date terminated: 14.3.75

Casing: Size :				
Depth :	BX 6.09	AX 21.34		
Core: Size :				
Depth :		A17 60.35		

Wedge Runoff:

Wedge placed: Nil. — Depth:

Proposed by : — Approved by:

Reason:

Extension:

Reason for termination: Nil. No mine series rocks intersected. — Final depth: 60.35

Condition of hole on completion:

Casing : Pulled

Cemented : No.

Bore hole survey: Multishot.

Water:

Comments on drilling conditions: Bad drilling conditions core brecciated and tends to wedge.

GEOPEKO LIMITED - KING ISLAND

GEOLOGICAL LOG

D.D.H. No. MA 7 - 1

0 - 60.35m E.O.H. **VOLCANICS**

Overall this unit is a volcanic breccia with occasional areas of finer grained material also present in it.

The core is extremely broken throughout and often has calcite present in the fractures as cement.

The breccia consists of irregular shaped fragments up to 5mm in size with the interstices filled with much finer fragments. The large fragments tend to be fine grained dark grey -green volcanics while the finer material is usually more green in colour. Some of the areas of uniform rock type, possibly large fragments here variolitic cavities filled with chlorite aggregates cause a spotted appearance.

Between 31.09 - 32.89m the core is yellow green in colour and contains minor Jasper.

GEOPEKO LIMITED - Magnetic Anomaly

GEOLOGICAL LOG

D.D.H. No. P.D.H. 12-1

Proposed Co-ordinates :-
Actual Co-ordinates :-

0 - 110	SAND
	Medium to coarse grained recent unconsolidated dume sands.
110 - 175	GRASSY GRANITE
	Initially weathered and very clay rich but becoming more normal down the hole.
175 - 180	QUARTZ FELDSPAR PORPHYRY
	A very fine grained black rock rich in quartz with small laths of feldspar and irrigular blebs of quartz visible as porphs.
180 - 200	GRASSY GRANITE
	As above.
200 - 225	GRANITE AND QUARTZ FELDSPAR PORPHYRY
	These samples contain a mixture of both types of chips but with the granite dominant. Minor scheelite is present as veinlets in the quartz feldspar phorphyry between 200 - 205 feet. Some small amounts of chalcopyrite are also present in this rock type. The scheelite is pure blue fluorescence scheelite.
225 -250	GRASSY GRANITE
	As above.

GEOPEKO LIMITED -

GEOLOGICAL LOG

D.D.H. No. P.D.H 42

Proposed co-ordinates :- 564500 N 216150 E.
Actual co-ordinated :- ——— ———

0 - 25 VOLCANICS

Fine chips of a grey green weathered crystaline volcanic with weathering apparent as red brown iron stained spots.

25 - 40 VOLCANICS

The normal chips appear to be very similar to the above but about 20% of the chips are grey pink in colour. These appear to be soft material from the fractures and quite large amounts of clay occur throughout.
From 30 - 35 there is quite a large content of dark grey - black chips of hornfelsed country rocks (hornfelsed pelitic sediments)

40 - 65 SPOTTED HORNFELSED COUNTRY ROCK

The dominant rock chips are now of a dark grey-black fine grained slightly spotted rock, with minor amounts of feldspar rich aplite present in some samples. These samples differ markially from the dense black chips present in hole 40.
From 50' the chips become a lighter grey colour and a large increase in the amount of pyrite present in the chips is apparant.

65 - 95 VOLCANICS

The samples in this area consist of chips of dark green crystaline volcanics with quite large amounts of pyrrhotite prsent on fracture planes.

From 80 - 90 about 30% of the chips are light grey silicious hornfelsed country rock and occur mainly as the larger chips while the volcanics are much finer in size.

95 - 120 VOLCANICS

Initially a series of grey-green coloured crystaline volcanics which become darker to black green in colour at about 110'. Red brown ironstaining is present on the fractures and quite large amounts of clay contamination occur between 110' and 120'.

120 - 14- VOLCANICS

Very dark black crystaline volcanics more coarsely crystaline than above.

GEOPEKO LIMITED -

GEOLOGICAL LOG

D.D.H. No. P.D.H. 42

140 - 170 HORNFELSED COUNTRY ROCKS

Fine chips of a fine grained grey black hornfelsed country rocks.

170 - 250 VOLCANICS ?

Grey black chips of what appear to be crystaline volcanics. These become more black green in colour down the hole. From 210' - 225' pymhotite is noticeable in these chips. The crystals become finer towards 250'.

PERCUSSION DRILL LOG PDH 48

Proposed Co-ords.	564 470N	217115E
Actual Co-ords.	564 470.43N	217 114.20E

0 - 30' SOIL

Soil with grey green clay.

30 - 100' UPPER VOLCANICS

Very weathered dark green crystalline volcanics present here as fine chips often with red brown iron staining and lighter grey green weathered surfaces.

100 - 155' UPPER VOLCANICS

Fresh dark green finely crystalline volcanics occuring as fine chips.

155 - 175' GRANITE

A light grey white coloured series of chips of Grassy granite.

175 - 205' UPPER VOLCANICS

In this unit large crystals (needles) of actinolite are visible in the chips.

205 - 245' QUARTZ BIOTITE HORNFELS

A purple black coloured rock rich in biotite but with noticable amounts of quartz present in it.

245 - 265' UPPER VOLCANICS

Dark green black actinolite rich crystalline volcanics.

265 - 305' QUARTZ BIOTITE HORNFELS

As above both these units are hornfelsed pelitic rocks of the overlying siltstones and sediments and are not part of the mine series.

305 - 325' UPPER VOLCANICS

This unit is similar to the volcanics above and is very rich in actinolite needles.

325 - 350' APLITE

A fine grained pink aplite with minor biotite present in it.

350 - 400' GRASSY GRANITE

Shows large pink feldspar crystals, as normal.

E.O.H. 400'.

PERCUSSION DRILL LOG PDH 49

Proposed Co-ords. 564700N 214780E

Actual Co-ords. 563705.67N 214768.31E

0 - 30' Soil.

30 - 100' WEATHERED VOLCANICS

Very weathered dark green crystalline volcanics usually present as fine chips often with red brown iron staining and lighter green weathered surfaces.

100 - 155' FRESH VOLCANICS

Dark green crystalline volcanics unweathered.

155 - 175' GRASSY GRANITE

A light grey white coloured granite.

175 - 205' UPPER VOLCANICS

As above with this case large needles of actinolite easily visible in the chips.

205 - 245' BIOTITE QUARTZ HORNFELS

Purple black in colour very rich in biotite. Some acicular needles are present here.

245 - 265' VOLCANICS

Dark green-black crystalline volcanics with large numbers of actinolite needles present here.

265 - 275' APLITE

A fine grained aplite with quartz and feldspar most common but only minimal biotite.

275 - 305' BIOTITE QUARTZ HORNFELS

As above.

305 - 325' VOLCANICS

As above, very rich in actinolite needles.

325 - 350' APLITE

Quite pink in colour and biotite rich.

350 - 400' GRASSY GRANITE

Typical Grassy granodiorite.

PERCUSSION DRILL LOG PDH 50

Proposed Co-ords.	561800N	213700E
Actual Co-ords.	561798.98N	213703.65E

0 - 40' Soil and mud, clay.

40 - 70' PYROXENE HORNFELS

A series of very light coloured grey green rock chips. These appear to be leached chips of pyroxene hornfels.

70 - 85' PYROXENE HORNFELS

This unit consists of very fine chips of grey green coloured pyroxene hornfels with minor amounts of biotite hornfels and moderate amounts of calcite present in the pits. Good scheelite is visible in these samples.

85 - 110' IMPURE MARBLE

The samples from this area are dominantly marble with lesser amounts of light grey green pyroxene and andradite garnets being present here. Good scheelite is visible in the pits between 85 and 95' and between 105 - 110'.

110 - 240' MARBLE

This unit consists of a pure dark grey marble well crystalline in appearance, with minor amounts of biotite and pyroxene hornfels present in some samples.

Minor - moderate scheelite is apparent between 120 - 130'.

240 - 250' PYROXENE GARNET CALCITE HORNFELS

In this area marble remains dominant but minor amounts of pyroxene and garnet are apparent in the chips by their green and brown colours.

Minor scheelite is present here.

250 - 300' BIOTITE PYROXENE HORNFELS

The samples in this zone consist of black purple biotite hornfels chips and about equal amounts of lightish green pyroxene hornfels chips.

Both kinds of chips are more granular in texture than normal.

300 - 310' POSSIBLE FAULT ZONE

This is an area of broken ground and poor sample recovery. The samples here contain quite a large amount of quartz

both within the chips and as crystals of vein quartz. The other chips appear similar to those above but are much sandier in nature.

310 - 320' BIOTITE HORNFELS

Samples consist of black purple biotite hornfels with moderate amounts of a grey quartzitic rock type.

320 - 330' QUARTZITE

This unit appears to be a grey quartzite quite rich in pyrite and similar in appearance to the quartzites encountered in No. 1 Orebody.

Minor amounts of biotite hornfels occur in this unit.

Hole terminated at 330' after 30' of very broken ground.

PERCUSSION DRILL LOG PDH 53

Proposed Co-ords. 565900N 218000E

0 - 50' SOIL

Soil, mud and clay. After the normal topsoil horizon the clay is much greyer and contains minor dark grey spots.

50 - 172' SILTSTONES AND SANDY SILTSTONES

These chips are grey black in colour with fair amounts of pyrite present in them.

PERCUSSION DRILL LOG PDH 54

Proposed Co-ords. 564675N 217500E

0 - 170' UPPER VOLCANICS

Initially these volcanics are weathered and have a light grey-green or red brown colour on the surface of the chips. Internally they are crystaline and a darker green colour.

170 - 200' QUARTZ FELDSPAR PORPHYRY

A dark black crystaline rock with small white laths of feldspar apparent in the chips.

200 - 310' UPPER VOLCANICS

As from 0 - 170'.

310 - 330' UPPER VOLCANICS

Light green crystaline volcanic chips with minor calcite. This unit may be similar to the amygdaloidal basalt encountered in hole 27 which was drilled about 200 metres north west of this hole, where thin sections showed the calcite to occur as the fillings in some amygdales.

330 - 480' UPPER VOLCANICS

Dark green crystaline upper volcanics as from 0 - 170'.

480 - 500' UPPER VOLCANICS PLUS BIOTITE HORNFELS

The upper volcanic chips are as above but some chips of dark black purple biotite hornfels are present here.

The ground is broken and an increased water flow was encountered suggesting that this may be the mine series contact.

E.O.H. 500'.

PERCUSSION DRILL LOG PDH 55

Proposed Co-ords. 563000N 213950E

Actual Co-ords. 563001.23N 213950.03E

0 - 35' SOIL

Soil and mud, no rock chips.

35 - 45' VOLCANICS

Very weathered upper volcanics.

45 - 80' MUD

A greyish mud with no rock chips small weathered dark rounded particles present in some samples suggest this unit was of weathered slightly hornfelsed upper country rock.

80 - 130' UPPER VOLCANICS

From 80 - 105' these volcanics are light green in colour while from 105 - 130' they are dark green, the lighter colour may be due in part to weathering effects. Both parts of this unit are well crystalline.

130 - 140' VOLCANICS

As above except that in this section about 50% of the chips are of a fine grained aplite.

140 - 190' COUNTRY ROCKS

Small chips of black biotite quartz hornfels definately not a mine series type of biotite hornfels.

190 - 195' UPPER VOLCANICS

As above.

195 - 235' BIOTITE HORNFELS PLUS VOLCANICS.

A mixture of black country rock type of biotite hornfels and green crystalline volcanics.

235 - 295' BIOTITE PYROXENE HORNFELS

A banded unit consisting of fine bands of light green pyroxene hornfels in a dominantly biotite hornfels rock. In the first 35' of this unit the biotite hornfels appear to be more like the country rock type of hornfels than the more biotite less quartz rich mine series type.

E.O.H. 295'.

PERCUSSION DRILL LOG PDH 57

Proposed Co-ords.	563050N	213900E
Actual CO-ords.	563048.52N	213900.38E

0 - 80' SOIL then MUD

The mud here is dominantly a light grey colour with small dark rounded spots present in it indicative of well weathered country rocks.

80 - 90' COUNTRY ROCKS

Light grey weathered slightly hornfelsed overlying pelitic sediments. Minor darker spotting is present in these samples.

90 - 100' UPPER VOLCANICS

Light green crystalline volcanics.

100 - 130' COUNTRY ROCKS

The rock chips here are of an unweathered grey black biotite quartz hornfels derived from the overlying pelitic sediments.

130 - 140' COUNTRY ROCKS AND VOLCANICS

A mixture of chips of grey biotite quartz hornfels and green crystalline volcanics.

140 - 165' BIOTITE HORNFELS

This is a much darker black biotite quartz hornfels and appears to be derived from the overlying sediments rather than the mine sequence.

165 - 200' BIOTITE HORNFELS

The biotite hornfels in this unit is a black purple colour and is a mine series type rock. Minor green pyroxene hornfels and vein calcite are present in the first five feet.

200 - 210' PYROXENE HORNFELS

A green pyroxene rich hornfels with minor bands of biotite hornfels present in it.

210 - 270' BIOTITE PYROXENE HORNFELS

Good chips of a typical well banded biotite pyroxene hornfels. Alternating bands of black purple biotite and green pyroxene hornfels with only trace amounts of calcite make up this unit.

270 - 285' BIOTITE PYROXENE CALCITE GARNET HORNFELS

The biotite and pyroxene rich chips are in about similar proportions and compose the majority of the rock, lesser amounts of calcite and garnet are visible in the samples.

285 - 315' BIOTITE PYROXENE HORNFELS

A well banded unit as from 210 - 270'. Minor calcite is present from 290' to 315' as bands in the pyroxene hornfels rich chips.

315 - 330' MARBLE

Initially a very impure marble with quite large amounts of biotite and pyroxene chips present in the first two samples but the last sample is almost pure grey recrystalized limestone.

E.O.H. 330'.