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GEOPEKO - KING ISLAND

Report No. KI/82/1

MICROFILMED

PROGRESS REPORT E.L. 21/78 TWELVE MONTHS

TO 14th JANUARY ~~1981~~ 1982

25 MAR 1982

82-1719.

S. G. Brown

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KING ISLAND

JANUARY 1981²

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INTRODUCTION

Exploration Licence 21/78, first granted in January 1980, is held by Warman Services Limited and covers an area of 37 square kilometers offshore of south east King Island. This licence is contiguous with E.L. 15/66 and covers the offshore position of the Grassy Granite Contact zone.

Included within the area of 37 square kilometers is a portion of Mineral Lease 17M/79 covering part of the area south of Dolphin Mine. Only work carried out on ML 17M/79 for exploration purposes has been costed against E.L. 21/78. This excludes normal oreblocking diamond drilling in the mines but includes any holes drilled to test for major extensions to the mine series sequence. In this respect the same criteria are used here as in the expenditure quoted in the last report on E.L. 15/66.

The overall geological interpretation remains basically as outlined in the February 1981 report on this Licence, however since that time not only have the 1980 airborne survey results been received but additional exploration diamond drilling south of the Dolphin Mine area has been carried out.

It has now been confirmed that the mine series sequence, as defined in E.L. 15/66, extends continuously into at least the northern portion of E.L. 21/78. For this reason the work programmes for these two E.L.'s have tended to merge and it is difficult to completely separate the expenditure on some parts of the work. Where work has been carried out over the two E.L.'s as part of the same programme, the cost has been split between them based on the areas of each E.L. covered.

The majority of the work carried out in the past six months has been to follow up the theories for the possible continuity of the mine series sequence from the Dolphin area into the Southern Contact area adjacent to and west of the Grassy River Fault. This theory was reported in our last application for renewal of E.L. 21/78 in June 1981.

Overall progress has been satisfactory and the results to date encouraging, both locally and for the overall assessment of the potential of this E.L.

SUMMARY

The work carried out during the past six months consisted of:-

- Diamond drilling of two holes D160/22 and D300/5, from the southernmost openings in Dolphin mine to test the area south of the Swan Fault (Southern Orebody). These holes extended the known limits of the mine series (and ore horizons) south by about 100 metres in both cases. Diamond drill hole D160/22 intersected 43.0 metres of 'C' Lens skarn averaging 0.72% WO_3 while hole D300/5 encountered 18.2 metres of C Lens skarn. Assay results are awaited for D300/5. These results indicate that there is considerable potential for extension of the resource of Southern Orebody as well as increased support for the theory of possible continuity of sequence between that portion of the Dolphin mine and the Southern Contact area (Teredo prospect).

Diamond drilling has commenced on the first of three surface holes, located at the southern limit of the Dolphin sea dump, using a truck mounted type 250 drill rig. At the time of writing the first hole designed to test for an extension of Southern Orebody 150 metres south of the D300/5 intersection, is at a depth of 80 metres.

- Completion of trial echosounder traverses carried out to test the effectiveness of a more precisely controlled survey to locate outcrop on the sea floor. The results of this survey were disappointing in its initial aim but the possibility of carrying out sparker seismic and seaborne magnetics over the area is now being considered.
- Examination of offshore methods has shown that while it should be possible to drill in up to 25 metres of water using jack up barges this option is not available for deeper waters. The use of free floating drill ships in deeper water would, on initial costings, be extremely expensive and a high degree of confidence in the presence of mine series rocks in the area would be required prior to undertaking such work.

- Conversion of all regional data on both E.L. 21/78 and E.L. 15/66 to a uniform scale has progressed. The photo reductions have been completed but redraughting of some areas of poor quality reproduction is still required.

- The results of the susceptibility study of diamond drill cores from the Grassy Granite and Bold Head Granite Contacts have been forwarded to the company geophysicists. It appears from the raw data that there is, as expected, considerable variation in the magnetic susceptibility of various units of the Upper Volcanics.

WORK CARRIED OUT JULY 1981 TO JANUARY 1982

Conversion of the regional geological plans and the airborne magnetic contour plots to the standard scale of 1:10 000 has been carried out. Final draughts have been produced of the aeromagnetics but redraughting of the geological plans is still in progress. This reduction to 1:10 000 allows direct overlaying of the aeromagnetic contours on the regional geology, at a scale which permits study of the overall relationships in the whole of south east King Island and the offshore area. There are still some problems in correlating the geology with the interpretation of the aeromagnetic results, the most significant of which remains the actual location of the Grassy River Fault Zone. The difference in location is of the order of about 100 metres but this could be reduced once final interpretation of the aeromagnetics is completed.

The initial results of the susceptibility study which was carried out on cores from ten drill holes located round the Grassy and Bold Head Granite has been forwarded to the geophysicists in Sydney. This data is to be used to help obtain a better understanding of the causes of the magnetic character picked up by the aeromagnetic survey. To date work on this data has been aimed at constructing a series of theoretical cross sectional models for the offshore contact and the Grassy River Fault area. These can then be tested by diamond drilling.

The trial echosounder traverses were carried out in November 1981 using one of the local fishing boats. The object of this test was to attempt to locate the southern contact of the Grassy Granite. It was thought that this could find expression in a ridge of higher bedrock due to the greater resistance of the hornfels to erosion. Such a ridge is present along the onshore portion of the granite contact and it was thought that the possibility of a similar situation occurring offshore was high.

In the event no such ridge was located, possibly due to thick sand cover and insufficient resolution of the equipment used in the trial. There was however evidence for a trough lying about 500 metres off the breakwater and running north south. Such a trough could be a topographic expression of the Grassy River Fault.

It was initially proposed to follow up the echosounder survey with the use of divers to obtain samples of any outcrops located on the sea floor, however the inability to identify any definite rock outcrops on the echosounder records precluded the use of this method of obtaining additional geological information.

An indication of the depth of sand cover present in some of the offshore area is given by the fact that the first surface drill hole D300/8 located at 220 300 E 563 660 N, which is currently at 80 metres down the hole, encountered 50 metres of sand.

Consideration is being given to carrying out a marine sparker seismic, magnetic and echosounder survey using more sophisticated equipment. Such a survey would be of use in giving further data allowing better placement of any offshore drilling undertaken to test either extensions to Southern Orebody or the Southern Granite contact (Teredo Prospect). Discussions are being carried out with Australian Hydrographic Surveys of Sydney.

A study is currently underway of all available methods for drilling offshore in varying depths of water.

The methods being examined are:-

- a) Use of an anchored drill ship or barge
- b) Use of a jack up barge
- c) Use of a bottom positioned hydraulically operated drill rig.
- d) Use of a suspended drill rig mounted on casing below wave base.

To date although a number of companies have been contacted only one has given a completely costed quote. This was for a drill ship and the quote for two holes, one to 800 metres and one to 500 metres, was \$1.9 million including mobilization.

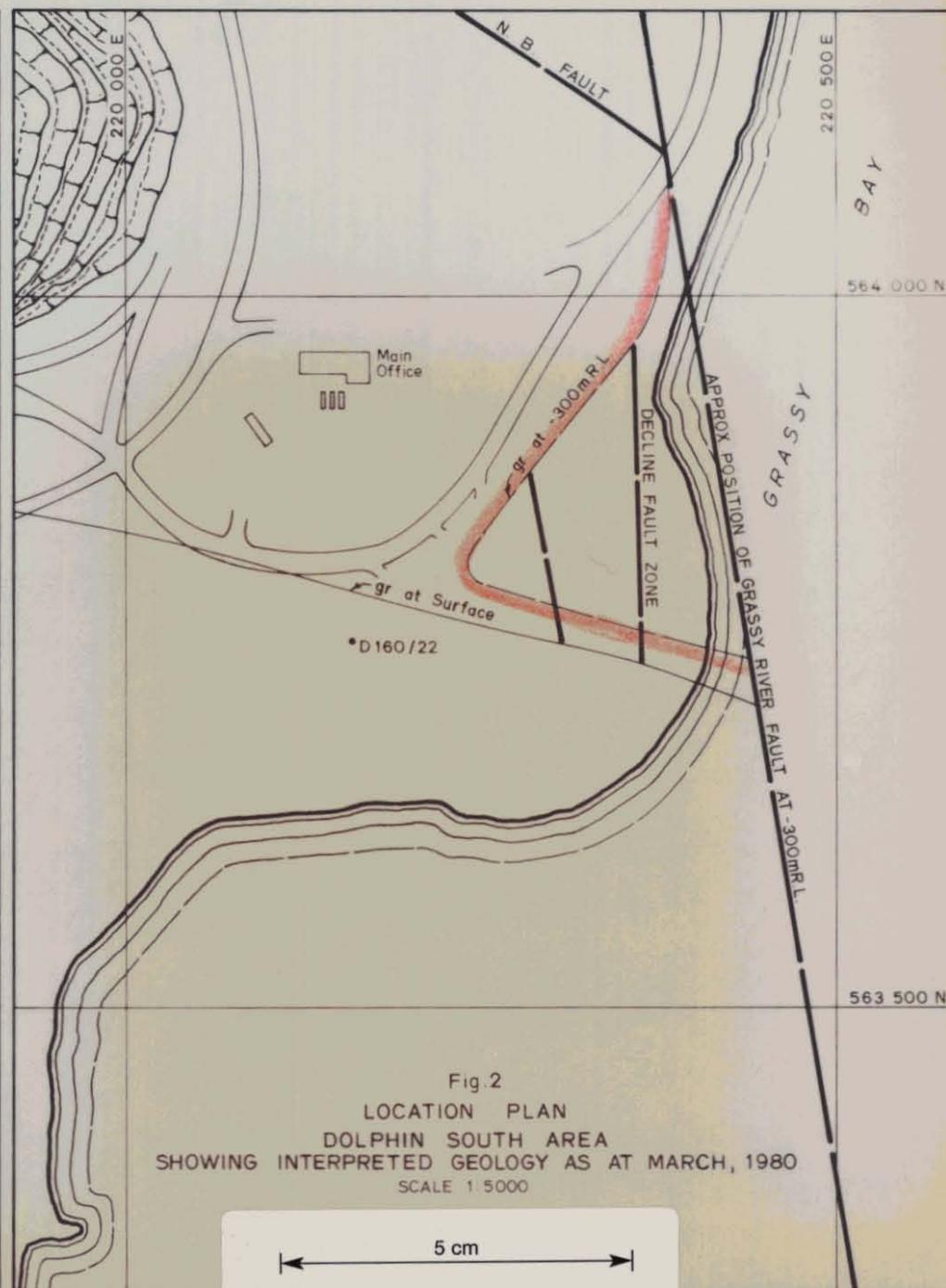
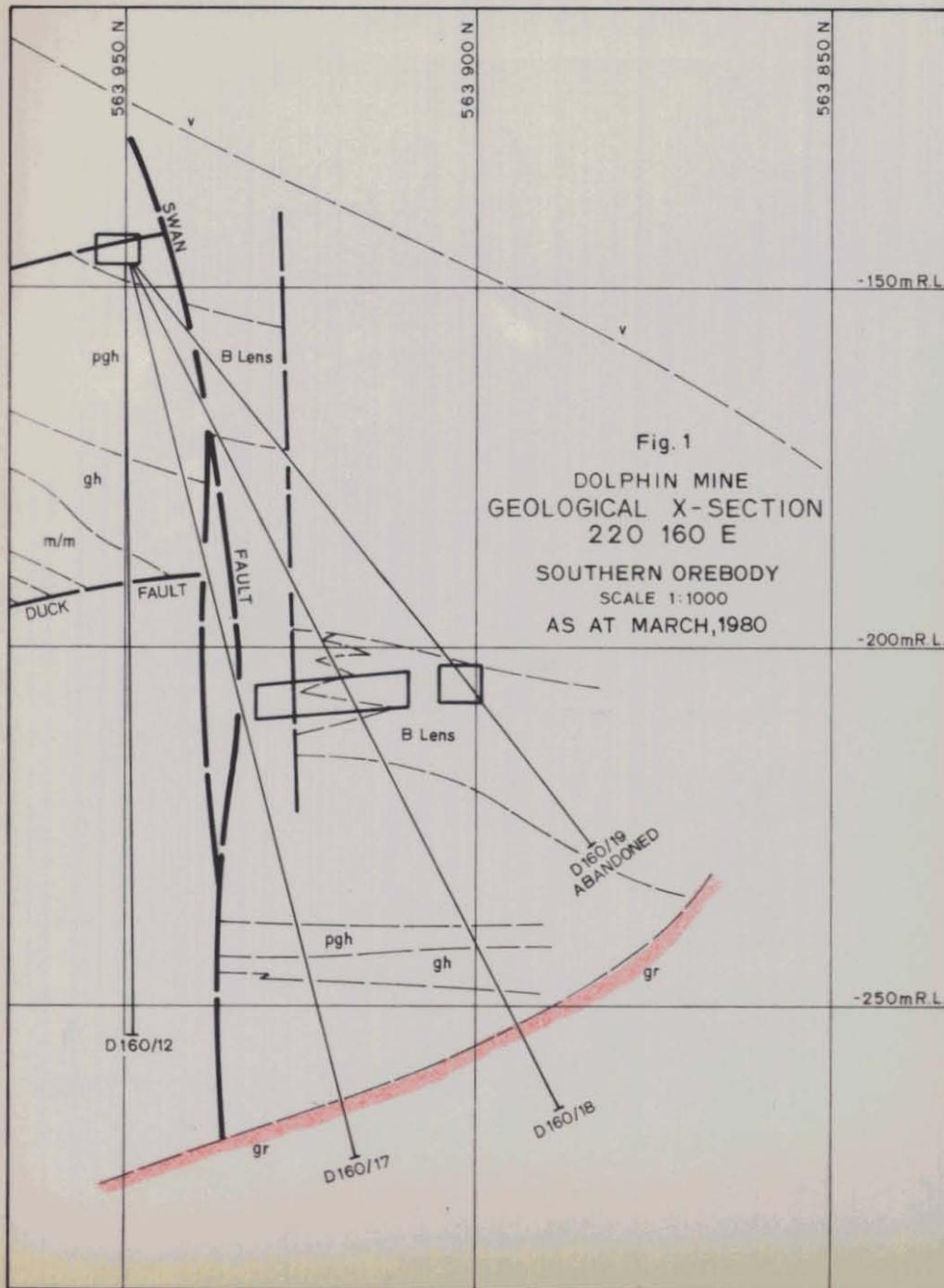
Such a cost is at present unacceptable. Since without additional data it is impossible to locate a drill hole with sufficient confidence that it will intersect mines series rocks,

Due to the thick sand cover which exists over, at least a portion of, the licence area location of any offshore drill holes is going to have to be based on the theoretical interpretations of geological and geophysical data. The currently available data is insufficient even to allow confidence to be expressed that the mine series rocks are present south of the area being tested by diamond drill D300/8.

Diamond drilling in the extreme south of the Dolphin mine area has been undertaken on two sections 220 160 E and 220 300 E. A total of six holes have been drilled for 668.6 metres. Only the first holes on each section D160/22 and D300/5 are regarded as true exploration holes, the others being considered as part of the normal oreblocking diamond drilling of Dolphin mine.

Both the two initial holes intersected ore grade mineralization within a 'C' Lens sequence similar to that previously identified in the rest of the Dolphin mine area. It is apparent from the attached sections that the area immediately south of the Swan Fault is structurally very complex and contains a very poorly mineralised disturbed 'C' Lens sequence. Diamond drilling in Dolphin mine prior to March 1980 had terminated in this zone and, due to the information available on the 220 160 E section, it was interpreted that the granite contact had risen to cut off the 'C' Lens sequence. The granite contact was interpreted to strike almost east-west and dip steeply north thus precluding any possible extensions of mine series rocks to the south. This interpretation is shown in Figures 1 and 2.

In June 1980 diamond drill hole D160/21 was drilled to close off the small mineral zone present on that section. This had been left open by the abandonment of D160/19, two years previously due to bad ground conditions in the hole. The results of this hole (D160/21) showed that the previous interpretation of the granite contact was erroneous and that in fact there was potential for further extension of the orebody to the south.



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The examination of the granite basement contours in the light of the results of D160/21 indicated that the strike of the granite contact must change from the overall east-west trend, apparent at Investigators 18 and 6 and in the Open Cut, to a north west - south east trend at some point east of 219 980 E where it has been fixed by diamond drilling. This change in the trend of the granite contact led to the suggestion that, not only was there a possibility for significant extensions to Southern Orebody but also that a 'window' of mine series rocks could possibly exist adjacent to and west of the Grassy River Fault. Such a window would provide continuity of sequence between the Dolphin mine area and the Southern Grassy Granite contact (Teredo Prospect).

Such continuity of sequence would mean that suitable host rocks (mine series) would be present underlying the volcanics adjacent to the Southern Granite Contact. Given the average dip present in the Dolphin mine, the 'C' Lens horizons would be at a depth of -850 metres approximately.

Under these circumstances the potential for the formation of a large ore deposit would be high and a target of similar size to the Dolphin/Open Cut deposit is not impossible. Total original resource of the Dolphin/Open Cut deposit is estimated at 14.5 million tonnes at 0.85% WO_3 .

In the Decline Orebody oreblocking of 'B' Lens in the hangingwall of the Lower Wedge stope has shown a significant tonnage of good grade ore to be present.

This is the only area in the Dolphin mine in which the 'B' Lens horizon has been sufficiently replaced to constitute a truly viable mining block in its own right. Current interpretation of the geology of this area is shown on the -200 metre R.L. Floor Plan. The Fulmar Fault is thought to have a throw in excess of 20 metres, down throwing south. Since it appears that the strike of the Dolphin and Grassy River Faults are such that they are diverging to the south it is considered possible that south of about 563 800 N there may be sufficient depth above their junction point to allow the presence of both the 'B' Lens and 'C' Lens sequence. Both the Decline Fault and the Grassy River Fault are regarded as having been channel-ways for the mineralizing fluids since the highest grade mineralization in both 'B' and 'C' Lenses adjacent to and between them. It is thus thought that the area south of the Fulmar Fault has a good chance of containing a high grade ore deposit, should suitable host rocks be present.

As an initial step to test these possibilities 65 metres of driving was undertaken to gain access to a suitable site from which D160/22 could be drilled. (220 160 E, 563 860 N).

This hole confirmed the presence of mine series rocks south to 563 750 N and also showed that they consisted of a more normal, less structurally complex, sequence than that occurring immediately south of the Swan Fault. As reported previously diamond drill hole D160/22 intersected 43 metres of skarn with an average grade of 0.72% WO_3 .

The fact that D160/22 did not encounter granite until the -300 metres level meant that the interpreted position of the granite contact at this level had to be moved considerably further west than previously located. This in turn meant that there was therefore a higher likelihood that continuity of sequence south to the Southern Contact could occur.

The results of drilling on the 220 160 E section have now been supported by drilling on the 220 300 E section where diamond drill hole D300/5 encountered 18.2 metres of mineralised garnet skarn. This hole did not intersect the Grassy Granite and confirmed the steepening of the Granite Contact towards the Grassy Fault. The cause of the down turn in the Granite Contact is not fully understood. However it would appear that it could possibly be due, in part, to a drag caused by the down faulting of the rocks east of the Grassy River Fault.

It is still too early to put any figures on the tonnage and grade possible in the Southern Orebody but continued drilling over the next twelve months should allow a reasonable assessment to be made of at least part of this area by next January.

In order to test out the interpretations made for the Southern Orebody and the Decline area, three surface holes were planned.

Their location is shown on the attached plan, (Interpreted Geology, Dolphin Mine and Adjacent areas) and drilling is currently underway on the first hole located at 220 300 E 563 660 N. This is planned to intersect the Southern Orebody at about -400 metres R.L.

It is proposed to continue to test the two areas of potential by diamond drilling from underground sites on 40 metres sections, as well as by the wide spaced exploration holes from surface.

To a large extent the future work programme on E.L. 21/78 will be dictated by the results of the three surface drill holes. Should these holes intersect extensions to the 'C' Lens ore horizon then it would be logical to plan the next drilling a further 200 metres south. This would be located offshore and the method employed to drill it will be dependent on the current study of the available option.

FUTURE WORK PROGRAMME

During the next six months the following work programme is planned:-

1. Drilling of three surface diamond drill holes, each 450 metres long, to test the area south of the Dolphin Mine for extensions of the mine series rocks south of the current mine limits. These holes will be drilled approximately 150 - 200 metres south of the current southernmost holes which have intersected mine series rocks, and will be located close to the current shore line. Drilling commenced on the first hole on 7th January, 1982.
2. Carry out a sparker seismic, magnetic and echosounder survey in the bay south of the above mentioned diamond drill holes. This survey is designed to give useful data to help further interpretation of the airborne magnetic results. In addition this survey will help locate possible drilling sites to test for further extensions of the mine series south of the current three surface drill holes, should they prove positive.
3. The data obtained from 1 and 2 above together with the susceptibility data already available will be used to further refine our interpretations of the airborne survey results. The basic overall aim is to produce the best possible interpretive cross sections for the Southern Granite contact area (Teredo Prospect) prior to taking a decision to diamond drill.
4. Subject to the results of 1 to 3 above further diamond drilling will be required south of the currently scheduled surface drill holes. These holes will be located offshore in about 10 to 20 metres of water and would probably be drilled from a barge. A programme of three holes would initially be envisaged. Assessment of the cost and suitability of all available offshore drilling methods is in progress and will require completion before a final decision is taken.

5. A possible diamond drill hole from the Grassy Port breakwater to test the structure and stratigraphy of the southern area (Teredo Prospect) is under consideration. The decision on the drilling of this hole would be dependent on the results of the drilling currently being undertaken, as well as the cost and feasibility of drilling a better positioned offshore hole.
6. Reassessment of all data, and hopefully, improvement in our interpretation will be carried out as additional information becomes available.

S. Grieve Brown
SUPERVISING GEOLOGIST

15/2/82

EXPENDITURE

E.L. 21/78 Six months to 14th January, 1982.

Geology	\$ 2 232.00
Drafting	639.00
Diamond Drilling	16 368.94
Geophysical	620.00
Field Expenses	77.00
Administration	1 711.00
	<hr/>
	\$21 887.94
	<hr/>

The expenditure on diamond drilling includes 50% of the cost of hole D160/22 and all the cost of hole D300/5.

BIBLIOGRAPHY

- Brown S. G. 1975 Progress Report on the Exploration of the Grassy Granite Contact Zone. Unpublished Company Report.
- Brown S. G. 1981 An Interim Progress Report on Exploration Licence 21/78 Unpublished Company Report.
- Brown S. G. 1981 Progress Report on Exploration Licence 15/66 for the Six Months Ended 24th October, 1981.
- Deakin R. C. 1976 Geophysical Report on the Grassy Granite Contact Zone. Unpublished Company Report.
- Deakin R. C. 1977 Geophysical Progress Report on the Grassy Granite Contact Zone. King Island Unpublished Company Report.
- Edwards A. B., Baker C. and Callow D. J. 1955 Metamorphism and Metasomation at King Island Scheelite Mine. J. Geol. Soc. Aust., 3.
- Haynes P. A. 1973 The Petrology and Geochemistry of the King Island Scheelite Deposits and Associated Intrusion. B. Sc. (Hons) Thesis, Uni. Qld. Unpublished.
- Large R. R. 1971 Metasomatism and Scheelite Mineralisation at Bold Head. King Island. Pro. Aust. Min. 235 pp 31-45.
- Richardson R. L. 1976 Geophysical Report on the Grassy River Fault Zone. Unpublished Company Zone.
- Rogers M. C. 1976 The King Island Scheelite Deposits: A Review of their Features and Metallogenesis. Unpublished Company Report.
- Rogers M. C. 1974 Evidence Supporting that Cotton's Breccia and the Pyroxene Garnet Hornfels Unit have the same Origin. Geoscript Vol. 2 No. 11 (House Journal)
- Scott B. W. 1950 1950 The Petrology of the Volcanic Rock of South East King Island, Tasmania, Papers and Proc. of Royal Soc. of Tasmania 1950 pp 113-136.
- Soloman M. 1969 The Nature and Possible Origin of the Pillar Lava and Hyalaclastic Breccia of King Island. Australia Q.J.G.S. London Vol. 124 pp 153-159.

GEOLOGY - KING ISLAND SCHEELITELOG OF D.D.H. No. D 160/22

PLANNING PROPOSER: R. E. S. Davies DEPTH: 110 m
 LOCATION: L6 Diamond Drill Drive
 PURPOSE OF HOLE: Test Southern Orebody and Granite Contact
 PROPOSED CO-ORDS: 220 160 E 563 850 N
 INCLINATION: -45°
 BEARING: 180° $^{\circ}$ Grid $^{\circ}$ Mag
 TARGET: E N
 DEPTH:
 CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
 SURVEYED BEARING: $179^{\circ} 49'$ $^{\circ}$ Grid $^{\circ}$ Mag
 SURVEYED IN BY: DATE:
 ACTUAL CO-ORDS: 220 159.37 E 563 850.75 N
 R.L. OF COLLAR: 205.5 m
 INCLINATION OF HOLE: $-44^{\circ} 16'$
 PICKED UP BY: R. Howman DATE: 21/7/81

SUMMARY LOGGED BY: R. E. S. Davies
 RESULTS: 88 - 131 m, 43 m @ 0.72% WO_3 C Lens S.O.B.

DRILLING DATE COMMENCED: 15.7.81 DATE TERMINATED: 3.8.81
 DRILLER/CONTRACTOR: S. Batchelor/A.D.D.
 CASING: SIZE:
 DEPTH:
 CORE: SIZE: 46TT
 DEPTH:
 WEDGE PLACED: DEPTH: PROPOSER:
 EXTENSION:
 FINAL DEPTH: 151 m
 REASON FOR TERMINATION: Sufficient depth of granite
 CONDITION OF HOLE ON COMPLETION:
 CASING:
 CEMENTED:
 BORE HOLE SURVEY: M/S
 WATER:
 COMMENTS ON DRILLING CONDITIONS:

SUMMARY BORE HOLE SURVEY DATAD.D.H. No. D 160/22

Surveyed method: Multishot
 Final depth: 151.0 m
 Casing depth: 1.0 m

Depth surveyed to: 151.0 m
 Date surveyed: 3/8/81
 Surveyed by: c. O'Brien
 Checked by:

Depth (m)	Bearing		Inclination		True Vertical Depth (m)	Co-ordinates	
	Grid	Mag.	Read	Corr.			
0.0	179.82			-44.27	0.0		
10.0	181.00	S9° E	-46.00	-44.00	7.0		
19.0	181.00	S9° E	-45.50	-44.50	13.2		
28.0	181.00	S9° E	-45.50	-44.50	19.5		
37.0	180.00	S10° E	-45.25	-44.75	25.8		
46.0	181.50	S8° 30' E	-45.00	-45.00	32.2		
55.0	182.00	S8° E	-45.00	-45.00	38.5		
64.0	181.50	S8° 30' E	-45.00	-45.00	44.9		
73.0	181.50	S8° 30' E	-45.00	-45.00	51.3		
82.0	181.50	S8° 30' E	-45.00	-45.00	57.6		
91.0	181.50	S8° 30' E	-45.00	-45.00	64.0		
100.00	181.50	S8° 30' E	-45.25	-44.75	70.4		
109.0	182.00	S8° E	-45.50	-44.50	76.7		
118.0	182.50	S7° 30' E	-45.25	-44.75	83.0		
127.0	184.00	S6° E	-45.50	-44.50	89.3		
139.0	181.50	S8° 30' E	-46.00	-44.00	97.8		
151.0	181.50	S8° 30' E	-46.00	-44.00	106.1		
EOH							

REMARKS:

CORE RECOVERY

D.D.H. No. D 160/22

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.0 - 2.6	2.6	2.6	100
2.6 - 4.5	1.9	1.9	100
4.5 - 6.0	1.5	1.5	100
6.0 - 8.0	2.0	2.0	100
8.0 - 10.2	2.2	2.1	95
10.2 - 12.0	1.8	1.8	100
12.0 - 15.0	3.0	3.0	100
15.0 - 16.8	1.8	1.8	100
16.8 - 19.8	3.0	3.0	100
19.8 - 22.8	3.0	3.0	100
22.8 - 25.8	3.0	3.0	100
25.8 - 28.8	3.0	3.0	100
28.8 - 31.8	3.0	3.0	100
31.8 - 34.8	3.0	3.0	100
34.8 - 36.5	1.7	1.7	100
36.5 - 39.5	3.0	3.0	100
39.5 - 42.5	3.0	3.0	100
42.5 - 45.5	3.0	3.0	100
45.5 - 48.5	3.0	3.0	100
48.5 - 51.5	3.0	3.0	100
51.5 - 54.5	3.0	3.0	100
54.5 - 57.5	3.0	3.0	100
57.5 - 60.5	3.0	3.0	100
60.5 - 63.5	3.0	3.0	100
63.5 - 66.5	3.0	3.0	100
66.5 - 69.5	3.0	3.0	100
69.5 - 72.3	2.8	2.8	100
72.3 - 75.0	2.7	2.7	100
75.0 - 77.0	2.0	2.0	100
77.0 - 77.1	0.1	0.1	100
77.1 - 80.0	2.9	2.9	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 - 91.0	2.0	2.0	100
91.0 - 94.0	3.0	3.0	100
94.0 - 97.0	3.0	3.0	100
97.0 - 100.0	3.0	3.0	100
100.0 - 102.0	2.0	2.0	100
102.0 - 105.0	3.0	3.0	100
105.0 - 108.0	3.0	3.0	100
108.0 - 111.0	3.0	3.0	100
111.0 - 114.0	3.0	3.0	100
114.0 - 117.0	3.0	3.0	100
117.0 - 120.0	3.0	3.0	100
12.0 - 123.0	3.0	3.0	100
123.0 - 126.0	3.0	3.0	100
126.0 - 129.0	3.0	3.0	100
129.0 - 132.0	3.0	3.0	100
132.0 - 135.0	3.0	3.0	100
135.0 - 136.5	1.5	1.5	100
136.5 - 139.5	3.0	3.0	100
139.5 - 142.5	3.0	3.0	100
142.5 - 145.5	3.0	3.0	100
145.5 - 148.5	3.0	3.0	100
148.5 - 150.0	1.5	1.5	100
150.0 - 150.0	1.0	1.0	100

ASSAY DATA

D.D.H. No. D 160/22

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO ₃	Mo		
D 13379	60	61	1.0	1.0	0.41			
80	61	62	"	"	0.56			
81	74	75	"	"	0.39			
82	75	76	"	"	0.74			
83	76	77	"	"	0.24			
84	77	78	"	"	0.18			
85	85	86	"	"	0.08			
86	86	87	"	"	1.6			
87	87	88	"	"	0.16			
88	88	89	"	"	0.36			
89	89	90	"	"	0.80			
90	90	91	"	"	0.92			
91	91	92	"	"	0.88			
92	92	93	"	"	2.0			
93	93	94	"	"	1.03			
94	94	95	"	"	0.98			
95	95	96	"	"	0.83			
96	96	97	"	"	0.33			
97	97	98	"	"	0.76			
98	98	99	"	"	1.32			
99	99	100	"	"	3.0			
400	100	101	"	"	0.11			
01	101	102	"	"	0.16			
02	102	103	"	"	0.76			
03	103	104	"	"	0.80			
04	104	105	"	"	0.80			
05	105	106	"	"	2.1			
06	106	107	"	"	0.79			
07	107	108	"	"	0.90			
08	108	109	"	"	0.80			
09	109	110	"	"	0.40			
10	110	111	"	"	0.21			
11	111	112	"	"	0.41			
12	112	113	"	"	0.44			
13	113	114	"	"	0.14			
14	114	115	"	"	0.36			
15	115	116	"	"	0.06			
16	116	117	"	"	0.64			
17	117	118	"	"	0.42			
18	118	119	"	"	0.13			
19	119	120	"	"	0.86			
20	120	121	"	"	0.83			
21	121	122	"	"	0.68			
22	122	123	"	"	0.65			
23	123	124	"	"	0.57			
24	124	125	"	"	0.83			
25	125	126	"	"	0.50			
26	126	127	"	"	0.16			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

ASSAY DATA

D.D.H. No. D 160/22

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO ₃	Mo		
D 13427	127	128	1.0	1.0	0.46			
28	128	129	"	"	0.68			
29	129	130	"	"	0.77			
30	130	131	"	"	0.31			
31	131	132	"	"	0.11			
32	132	133	"	"	0.07			
33	133	134	"	"	0.15			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGY - KING ISLAND SCHEELITEGEOLOGICAL LOGD.D.H. No. D 160/22Summary

0.0 - 7.0 m Bh/ph
 7.0 - 32.0 m Bh
 32.0 - 51.4 m Bh/ph
 51.4 - 89.0 m B Lens
 89.0 - 124.0 m Gh
 124.0 - 134.0 m B,F,B.
 134.0 - 151.0 m Gr.

0.0 - 7.0 m

BIOTITE HORNFELS/PYROXENE HORNFELS

Intermixed unit of biotite hornfels and pyroxene hornfels, biotite hornfels 0 - 1 m, 2.4 - 5.0 m, the remainder is a pale grey/ green pyroxene hornfels which contains rare scattered crystals of scheelite.

Bedding is @ 45° @ 60 m

Molybdenite is present on joint surface @ 2.7 m

The ground is good with sticks about 50 m long.

7.0 - 32.0

BIOTITE HORNFELS

Black, fine grained homogeneous biotite hornfels, mostly good ground with sticks 50 cm. long.

Local areas of broken core occur @ 10 - 10.2 m, 14 m, 16.4 m, and 28.4 m. None of them are very significant.

Bedding is @ 30° @ 20 m

32.0 - 51.4

BIOTITE HORNFELS/PYROXENE HORNFELS

A mixed unit of alternating biotite hornfels and pyroxene hornfels, no scheelite is present.

Good ground apart from local broken core at 36.7 and 50 m.

Bedding is @	30°	to LCA @	33 m
"	25°	"	39 m
"	35°	"	46 m

No fissility is developed on the biotite hornfels/pyroxene hornfels contacts, the rock is a solid unit with joints every 20 - 40 cm.

An aplite occurs from 47.9 - 48.6 m.

GEOLOGY - KING ISLAND SCHEELITEGEOLOGICAL LOGD.D.H. No. D 160/22

51.4 - 89.0 m

B LENS

A mixed unit of biotite hornfels, pyroxene and garnet hornfels with pyroxene hornfels probably dominating. Patchy andradite garnet skarn occurs, and is mineralised. The longest intersection is from 75 - 77 m.

The interval from 78 m appears to contain some marble pods and could be interpreted as stratigraphic pyroxene garnet hornfels. However due to the absence of any obvious faults it is included here in B Lens.

The ground is moderately broken with sticks ranging from 40 - 10 cm with a number of small (5 - 10 cm) pieces.

Bedding is @	25°	to LCA @	54 m
"	30	"	59 m
"	25	"	63 m
"	40	"	67 m
"	35	"	73 m

Aplite occurs from 77.8 - 78.6 m. Beyond that, in the ?pyroxene garnet hornfels unit bedding cannot be definitely detected.

89.0 - 124.0

GARNET HORNFELS

A massive homogeneous unit of well mineralised (1%) khaki brown andradite garnet skarn.

The first 2 m are badly broken and indicate the presence of a significant fault.

The remainder of the unit is competent with only minor broken core @ around 100 m.

Aplite is present @ 111 - 111.8 m

Bedding cannot be easily distinguished anywhere in the unit.

124.0 - 134.0

MIXED UNIT (BANDED FOOTWALL BEDS?)

This unit grades into the overlying garnet hornfels. The upper contact is defined by the disappearance of yellow scheelite and the appearance of lower grade but blue scheelite @ 124 m

Sulphide (Pyrite and chalcopyrite) appear at the same point and increase in density to a maximum @ 129 - 130 m where they form approximately 25% of the core. This section has a background of pyroxene hornfels which fades away at about 130 - 131 m and the core becomes a pure cream marble to 132.5 m.

The last 1.5 m is mostly pyroxene hornfels with some sulphides and then grades into the granite contact.

Bedding is @ 30° to LCA @ 131 m

GEOLOGY - KING ISLAND SCHEELITEGEOLOGICAL LOGD.D.H. No. D 160/22

134.0 - 151.0 m

GRANITE

Pink, medium grained granite/aplite.

EOH 151.0 m

GEOLOGY - KING ISLAND SCHEELITELOG OF D.D.H. No. D 300/5

PLANNING PROPOSER: R. E. S. Davies DEPTH: 90 m
 LOCATION: T7 Drill Cuddy -240 m
 PURPOSE OF HOLE: Test S.O.B.
 PROPOSED CO-ORDS: 220 300 E 563 900 N
 INCLINATION: -50°
 BEARING: 180° °Grid °Mag
 TARGET: E N
 DEPTH:
 CHECKED BY: DATE:

SURVEY SURVEY CO-ORDS: E N
 SURVEYED BEARING: 177° 49' °Grid °Mag
 SURVEYED IN BY: DATE:
 ACTUAL CO-ORDS: 220 301.4 E 563 897.2 N
 R.L. OF COLLAR: 237.4
 INCLINATION OF HOLE: -49° 27'
 PICKED UP BY: R. Howman DATE: 9/11/81

SUMMARY LOGGED BY: R. E. S. Davies
 RESULTS: 43 - 118 m, 5 m @ 0.71% WO₃
 123 - 129 m, 6 m @ 0.88% WO₃ gh Coast Oreblock

DRILLING DATE COMMENCED: 3/11/81 DATE TERMINATED: 30/11/81
 DRILLER/CONTRACTOR: J. Archer/A,D,D.
 CASING: SIZE:
 DEPTH:
 CORE: SIZE:
 DEPTH:
 WEDGE PLACED: DEPTH: PROPOSER:
 EXTENSION:
 FINAL DEPTH: 154.0 m
 REASON FOR TERMINATION: Abandoned due to Fault zone grabbing rods.
 CONDITION OF HOLE ON COMPLETION:
 CASING:
 CEMENTED:
 BORE HOLE SURVEY: M/S
 WATER:
 COMMENTS ON DRILLING CONDITIONS:

CORE RECOVERY

D.D.H. No. D300/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
0.00 - 3.00	3.0	3.0	100
3.00 - 5.70	2.7	2.7	100
5.70 - 8.70	3.0	3.0	100
8.70 - 11.70	3.0	3.0	100
11.70 - 13.70	2.0	2.0	100
13.70 - 16.30	2.6	2.2	84.62 ?
16.30 - 18.10	1.8	2.1	117 }
18.10 - 19.90	1.8	1.8	100
19.90 - 21.80	1.9	1.9	100
21.80 - 23.85	2.05	2.05	100
23.85 - 26.70	2.38	2.65	113
26.20 - 28.40	2.2	2.2	100
28.40 - 30.90	2.5	2.5	100
30.90 - 32.90	2.0	2.0	100
32.90 - 35.00	2.1	2.1	100
35.00 - 37.80	2.8	2.8	100
37.80 - 40.40	2.6	2.6	100
40.40 - 42.80	2.4	2.4	100
42.80 - 45.50	2.7	2.7	100
45.50 - 48.20	2.7	2.9	107
48.20 - 50.80	2.6	2.6	100
50.80 - 53.10	2.3	2.3	100
53.10 - 55.00	1.9	1.9	100
55.00 - 57.70	2.7	2.7	100
57.70 - 60.20	2.5	2.5	100
60.20 - 62.70	2.5	2.5	100
62.70 - 65.20	2.5	2.5	100
65.20 - 71.80	2.6	2.6	100
71.80 - 74.30	2.5	2.5	100
74.30 - 77.20	2.9	2.5	86
77.20 - 79.80	2.6	2.6	100
79.80 - 82.80	3.0	3.0	100
82.80 - 84.30	1.5	1.5	100
84.30 - 87.30	3.0	3.0	100
87.30 - 90.30	3.0	3.0	100
90.30 - 93.30	3.0	3.0	100
93.30 - 96.30	3.0	3.0	100
96.30 - 99.30	3.0	3.0	100
99.30 - 102.30	3.0	3.0	100
102.30 - 105.30	3.0	3.0	100
105.30 - 108.30	3.0	3.0	100
108.30 - 110.60	2.3	2.3	100
110.60 - 113.60	3.0	3.0	100
113.60 - 116.60	3.0	3.0	100
116.60 - 119.60	3.0	3.0	100
119.60 - 123.00	2.4	3.2	94
123.00 - 126.00	3.0	3.0	100
126.00 - 129.10	3.1	3.1	100
129.10 - 132.10	3.0	3.0	100
132.10 - 135.10	3.0	3.0	100
135.10 - 138.00	2.9	2.9	100

CORE RECOVERYD.D.H. No. D300/5

INTERVAL (m)	LENGTH (m)	LENGTH RECOVERED (m)	% CORE RECOVERY
138.00 - 141.00 m	3.0	3.0	100
141.00 - 144.00	3.0	2.8	93
144.00 - 147.00	3.0	3.0	100
147.00 - 148.00	1.0	1.0	100
148.00 - 150.50	2.5	2.7	108
150.50 - 153.50	3.0	3.0	100
153.50 - 154.00	0.5	0.35	70
EOH 154.0 m			

ASSAY DATA

D.D.H. No. D300/5

SAMPLE NO.	DEPTH (METRES)				ELEMENTS			COMMENTS
	From	To	Length	Length Rec.	WO ₃	Mo		
D 13633	18	19	1.0	1.0	0.31			
34	19	20	"	"	0.08			
35	89	90	"	"	0.22			
36	97	98	"	"	0.16			
37	98	99	"	"	0.14			
38	108	109	"	"	0.10			
39	109	110	"	"	0.08			
40	110	111	"	"	0.15			
41	111	112	"	"	0.06			
42	112	113	"	"	0.07			
43	113	114	"	"	0.89			
44	114	115	"	"	0.61			
45	115	116	"	"	0.94			
46	116	117	"	"	0.44			
47	117	118	"	"	0.65			
48	118	119	"	"	0.16			
49	119	120	"	"	0.13			
50	120	121	"	"	0.06			
51	121	122	"	"	0.06			
53	122	123	"	"	0.19			
54	123	124	"	"	1.5			
55	124	125	"	"	0.60			
56	125	126	"	"	0.39			
57	126	127	"	"	0.45			
58	127	128	"	"	0.73			
59	128	129	"	"	1.6			
60	129	130	"	"	0.18			
61	130	131	"	"	0.11			
62	131	132	"	"	0.10			
63	132	133	"	"	0.18			
64	153	154	"	"	0.20			

SPECIFIC GRAVITY

Depth (metres):

Rock Type:

S.G.:

Determined by:

GEOLOGICAL LOGD.D.H. No. D300/5Summary

0.0	-	14.7 m	Garnet pyroxene hornfels
14.7	-	57.7	Marble
57.7	-	86.3	Biotite Hornfels
86.3	-	100.0	Pyroxene garnet hornfels
100.0	-	103.3	Aplite
103.3	-	110.0	Pyroxene garnet hornfels
110.0	-	117.5	Garnet hornfels
117.5	-	120.0	Aplite
120.0	-	128.2	Garnet hornfels
128.2	-	133.0	Garnet pyroxene hornfels
133.0	-	154.0	Banded Footwall Beds

0.0 - 14.7 m

GARNET PYROXENE HORNFELS

Mixed unit of garnet pyroxene hornfels representing the top unit of B Lens. Dominant rock type is pyroxene hornfels with subsidiary garnet hornfels (grossular) biotite hornfels and marble. Small amounts of scheelite are present in veins and rare disseminated crystals.

The ground is generally fairly broken with core sticks around 20 cm long.

Bedding is @	35°	to LCA @	1 m
"	30°	"	3 m
"	25°	"	12 m

14.7 - 57.7

MARBLE

Essentially a large, monotonous unit of fresh grey marble locally altered to pyroxene hornfels.

Bedding is usually well displayed and ground is generally good (30 cm core sticks).

Rare crystals of scheelite occur in the unit, and from 18 - 20 m is the highest density, but is still below ore grade.

A major fault occurs at 39 - 40.2 m with some core loss. The fault zone consists of puggy, soft and friable decomposed marble and pyroxene hornfels and had to be cemented during drilling.

Broken ground at 54 - 55 m may indicate another fault. This zone consist of angular fragments 2.5 cm diameter of biotite hornfels.

The top and bottom contacts of this unit are gradational.

Bedding is @	25°	to LCA @	17 m
"	35°	"	22 m
"	35°	"	26.4 m
"	40°	"	30 m
"	10°	"	41 m
"	20°	"	49 m
"	30°	"	52 m
"	40°	"	54 m
"	55°	"	56 m

GEOLOGICAL LOGD.D.H. No. D300/557.7 - 86.3 m BIOTITE HORNFELS

Generally massive homogeneous biotite hornfels but cut by many fractures. From 57.7 to 64 m thin (1 - 2 cm) beds of pyroxene hornfels are interbedded with the unit. Aplite occurs from 67.5 - 70 m.

Broken or fractured core occurs at 59.5 - 60 m, 67 - 68 m, 73 - 77 m (1 - 10 cm fragments). The remainder of the core consists of 15 - 30 cm core sticks interspersed with sections of small 1 cm fragments and angular 5 cm pieces of core.

Overall this to quite a badly broken unit.

86.3 - 110.0 PYROXENE GARNET HORNFELS

Typical podded, mainly green pyroxene garnet hornfels. Ground generally good 30 - 40 cm sticks. Scheelite occurs rarely at 89 m and from 97 - 98.5 m, and around 108 m.

A coarsegrained aplite occurs at 100 - 103.3 m.

Possible bedding is at 40° to LCA @ 107 m

110.0 - 128.2 GARNET HORNFELS

A typical garnet hornfels in that it is fine grained and has a pale appearance. The first 2 m from 111 - 113 appears to be barren of scheelite. A fine grained aplite occurs from 110 - 111 m and from 117.5 - 120 m and has rather diffuse contacts.

Visible scheelite commences at 113 m but is very fine grained. The unit is mineralised to about 0.8% from here to the end, with a slight increase in grain size at ground 120 m.

The garnet hornfels has a pale, leached appearance at 121 - 122 m.

Initially to about 120 m the ground is fairly good with 30 m core sticks.

Shorter core sticks 10 - 15 cm occur from 120 to 123 m.

128.2 - 133.0 GARNET PYROXENE HORNFELS

A rather mixed unit that carries scheelite as large infrequent crystals associated with quartz. The background is pyroxene hornfels with fine grained garnet hornfels (andradite).

Ground is fairly good, 30 cm sticks.

Bedding is @ 30° to LCA @ 132 m

GEOLOGICAL LOG

D.D.H. No. D300/5

133.0 - 154.0 m

BANDED FOOTWALL BEDS

By no means a typical banded footwall beds, this unit consists of fractured and broken biotite hornfels interbedded with unmineralised fine grained andradite garnet hornfels with or increasing amount of feldspar with depth.

Severly broken ground occurs at 133 - 134 m, 136 - 137.5 m, 142 - 142.5 m, 146 - 148 m.

Thin Jasper bands 2 - 5 cm thick occurs in the last 2 m of the unit.

Bedding is @	25°	to LCA	133.5 m
"	10°	"	141 m
"	45°	"	148 m

Some chalcopyrite is present in the last 4 m of the unit.

EOH 154.0 m



Naracoopa

E.L. BOUNDARY 15/66

E.L. 15/66

Bold Head Mine

GRASSY

Bold Head

INV. 21

Open Cut and Dolphin Mine

Southwesterly Orebody of Dolphin

AREA OF PRIMARY POTENTIAL

Grassy Port

S T R A I T

E.L. 21/78 OFFSHORE

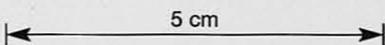
Seal Point

B A S S

*Southwesterly contact area.
KING ISLAND (Torado prospect)*

EXPLORATION LICENCES 15/66 and 21/78

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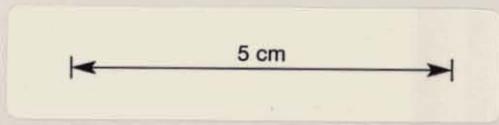


220 000 E



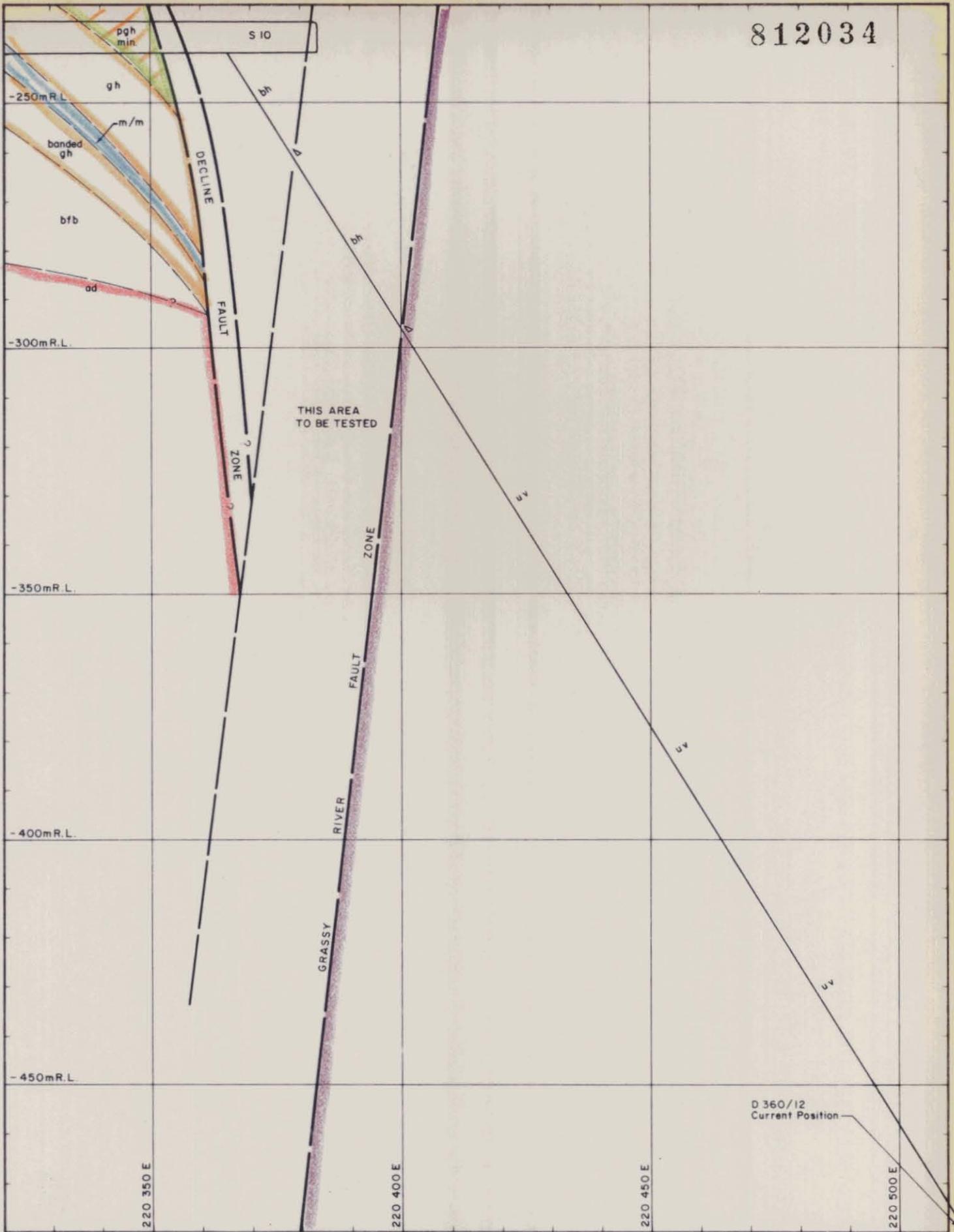
LONGITUDINAL SECTION

563 500 N



scale 1 : 10000

812034



REF PLAN

GEOLOGY S.G.B. 8-12-80

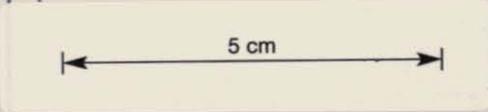
1:1000 SCALE

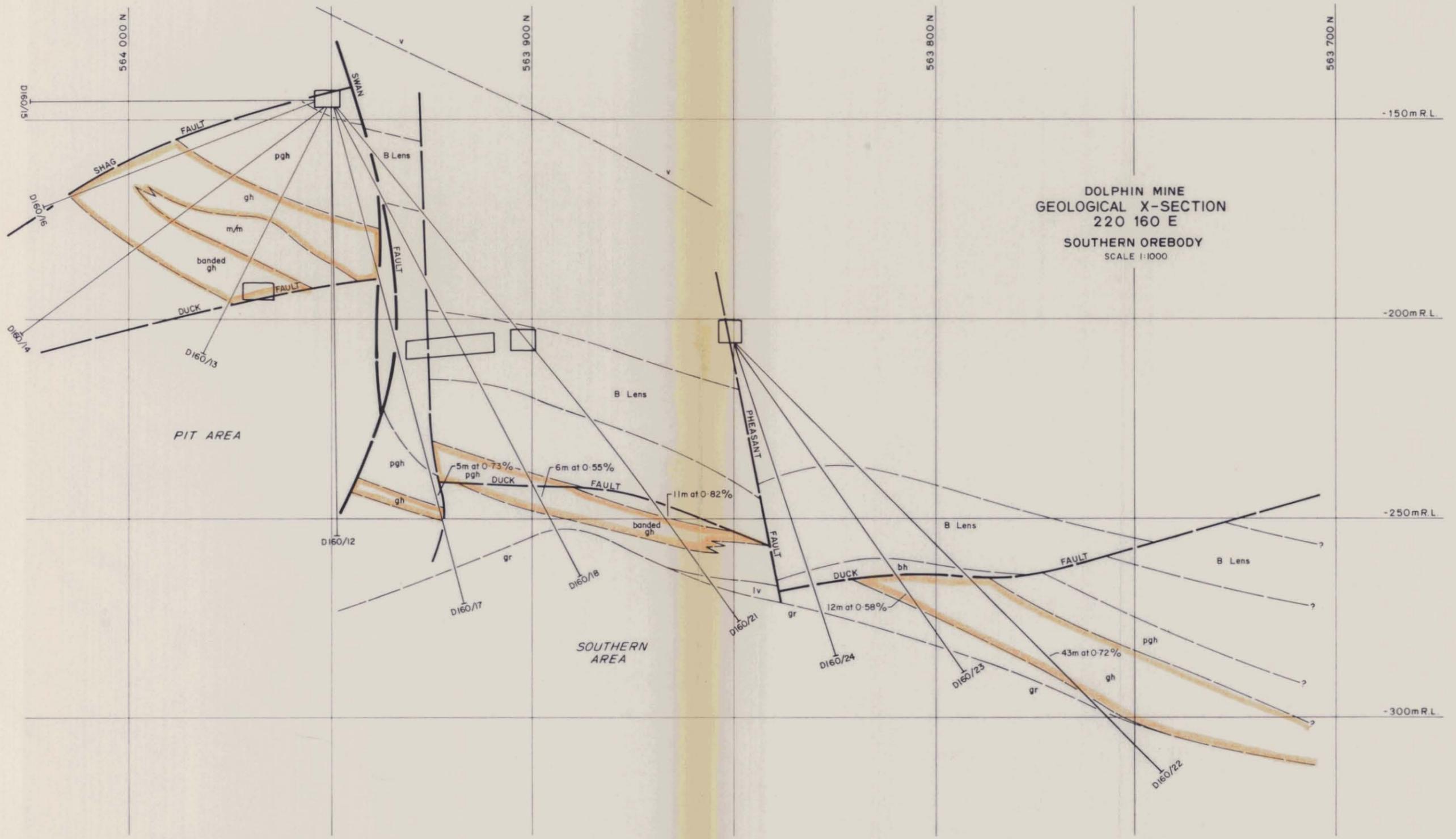
KIS KING ISLAND SCHEELITE
GRASSY KING ISLAND

SURVEY		
PLANNING		
ROCK MEC.		
GRADE CON		
DRAFTING		
T.S.S.		

DOLPHIN MINE
564 975 N L/SECT.
SHOWING DDH 360/12

DRAWING NUMBER





DOLPHIN MINE
GEOLOGICAL X-SECTION
220 160 E
SOUTHERN OREBODY
SCALE 1:1000

5 cm

563 900 N

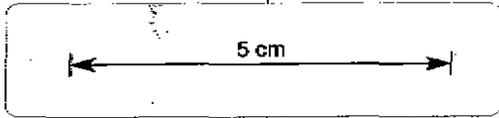
563 800 N

563 700 N

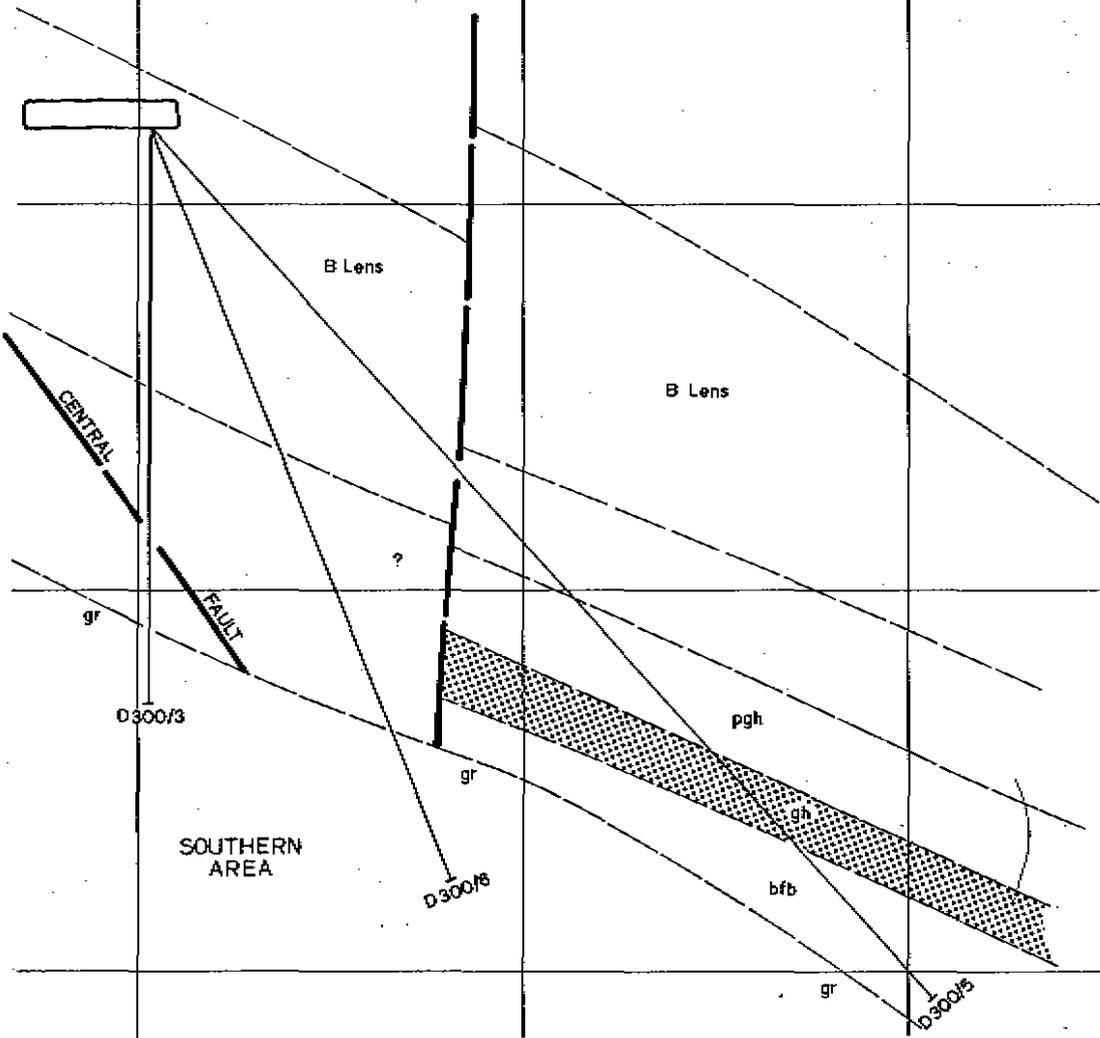
DDH 300/8
IN PROGRESS

-200m R.L.

DOLPHIN MINE
GEOLOGICAL X-SECTION
220 300 E
SOUTHERN OREBODY
SCALE 1:1000



-250m R.L.



-300m R.L.

-350m R.L.

812036

812037

GRASSY BAY

564 000 N

563 500 N

563 000 N

562 500 N

220 500 E

220 000 E

219 500 E

D 360/12 :
COLLAR-240m

APPROX. POSITION OF GRASSY RIVER FAULT AT -300m.R.L.

DECLINE FAULT ZONE AT -300m.R.L.

DECLINE FAULT ZONE SURFACE CONTACT

POSSIBLE MINE SERIES ROCKS

NORTHERN BOUNDARY FAULT
SURFACE CONTACT

CENTRAL FAULT

MAIN OFFICE

SWAN

D160/22

SURFACE

OVER BURDEN

DOLPHIN MINE PORTAL

GRASSY PORT

OPEN CUT

Dolphin Mine Office

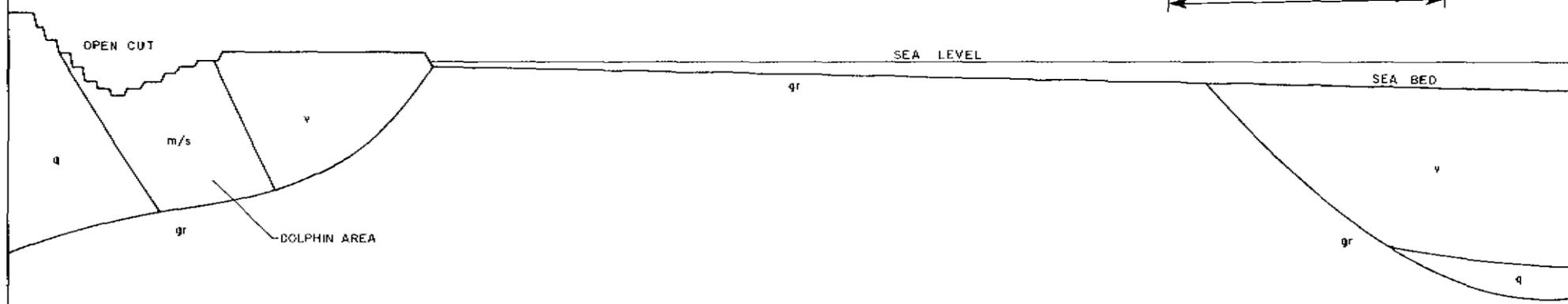
5 cm

- LEGEND:
-  C Lens horizons at -300m.R.L.
 -  Granite contact
 -  Fault
 -  Echosounder Traverses
 -  Proposed Surface Holes
 -  Proposed Inclined Surface Holes

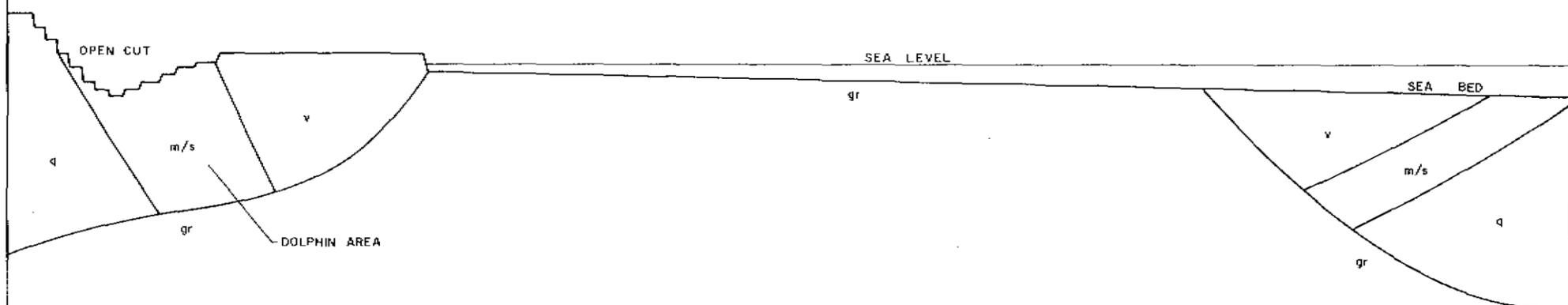
LOCATION PLAN
 INTERPRETED GEOLOGY OF
 DOLPHIN MINE & ADJACENT AREAS.
 SCALE 1:5000

POSSIBLE MODELS FOR SOUTHERN GRASSY GRANITE GEOLOGY

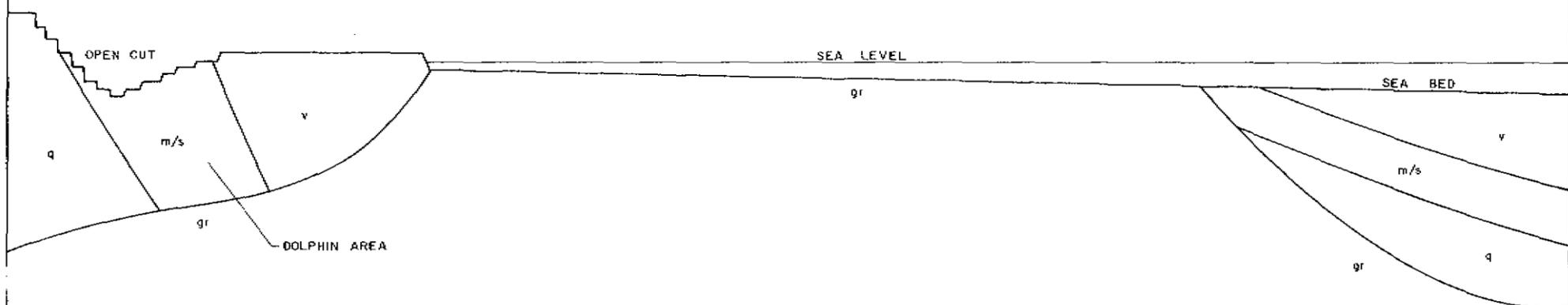
5 cm



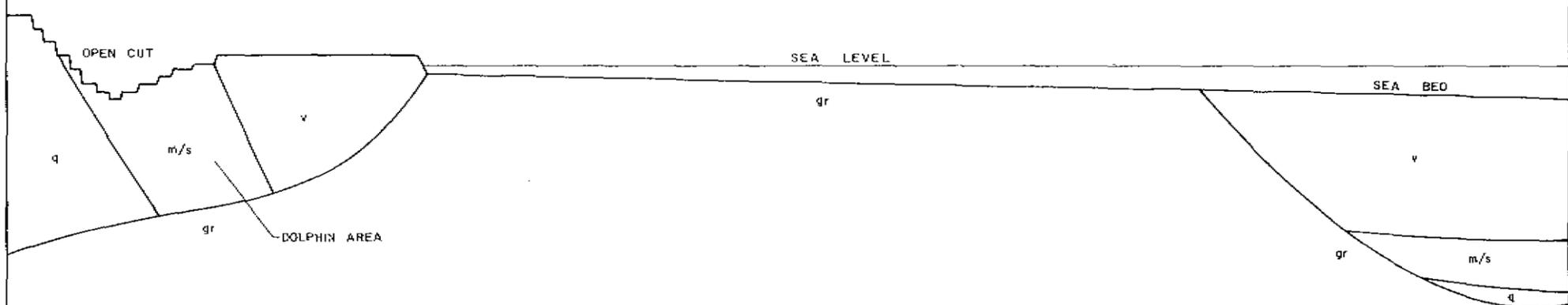
MODEL A.



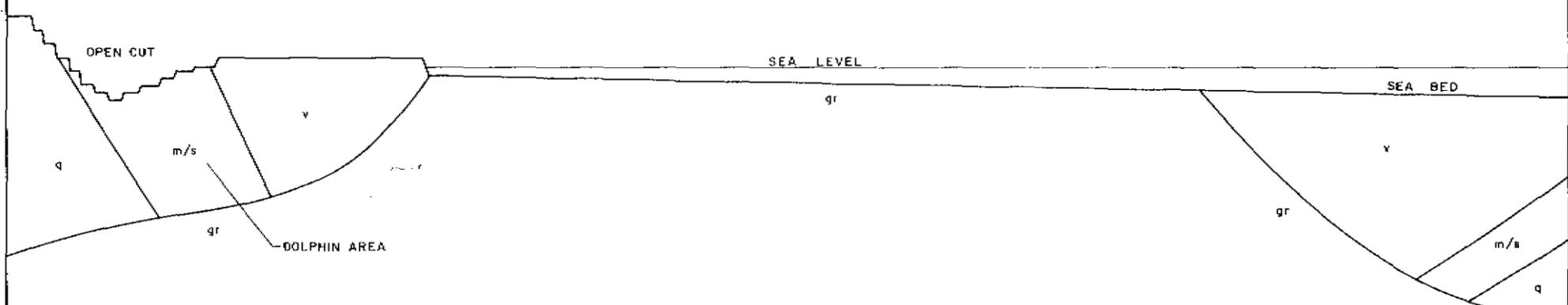
MODEL B.



MODEL C.

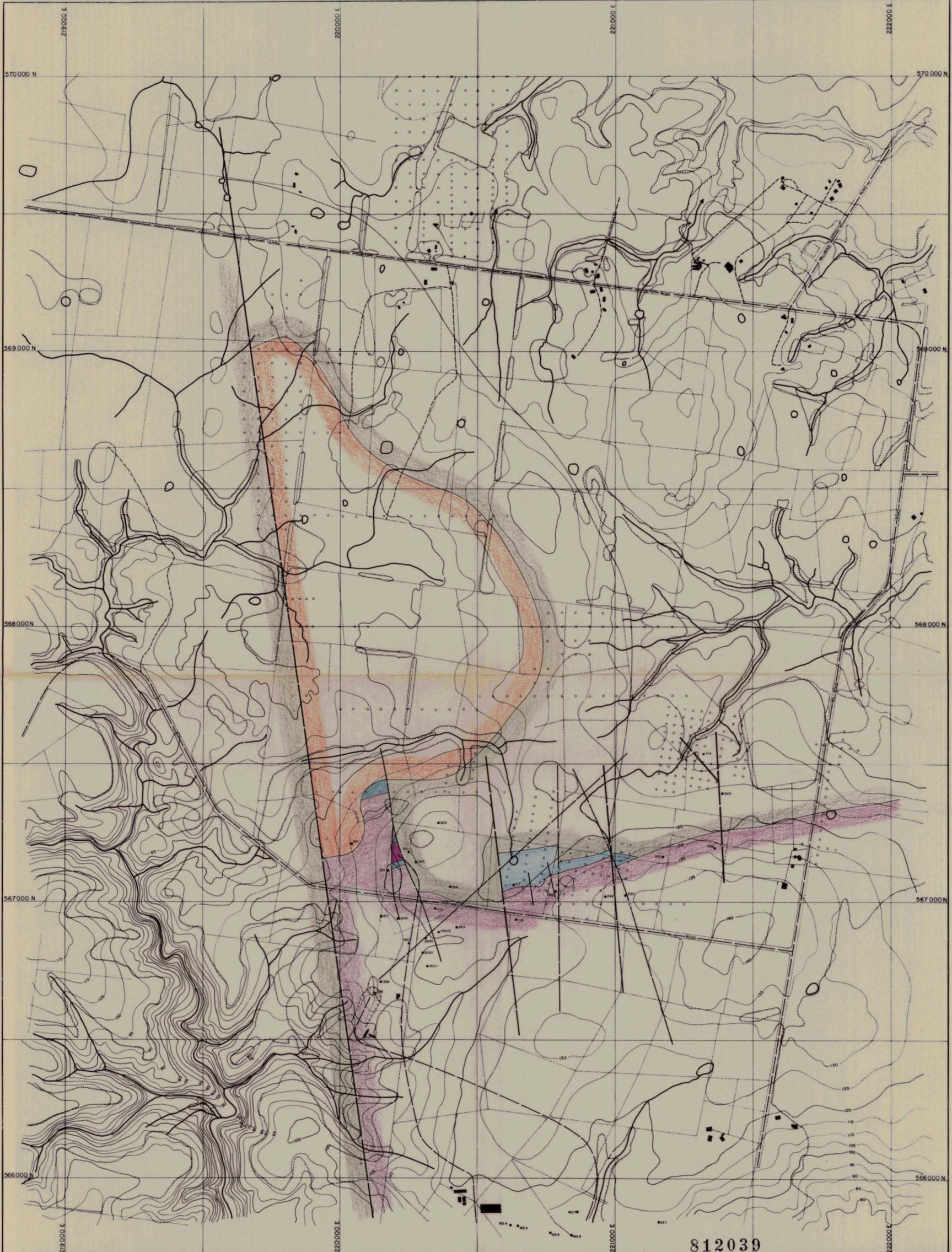


MODEL D.



MODEL E.

812038



812039

GEOPEKO LIMITED
KING ISLAND GROUP

No. KF 3

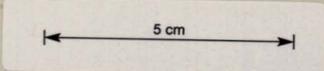
TOPOGRAPHICAL BASE MAP
SHOWING
DRILL HOLE LOCATIONS
AND
INTERPRETED GEOLOGY

KF1	KF2	KF3
KF4	KF5	KF6
KF7	KF8	KF9

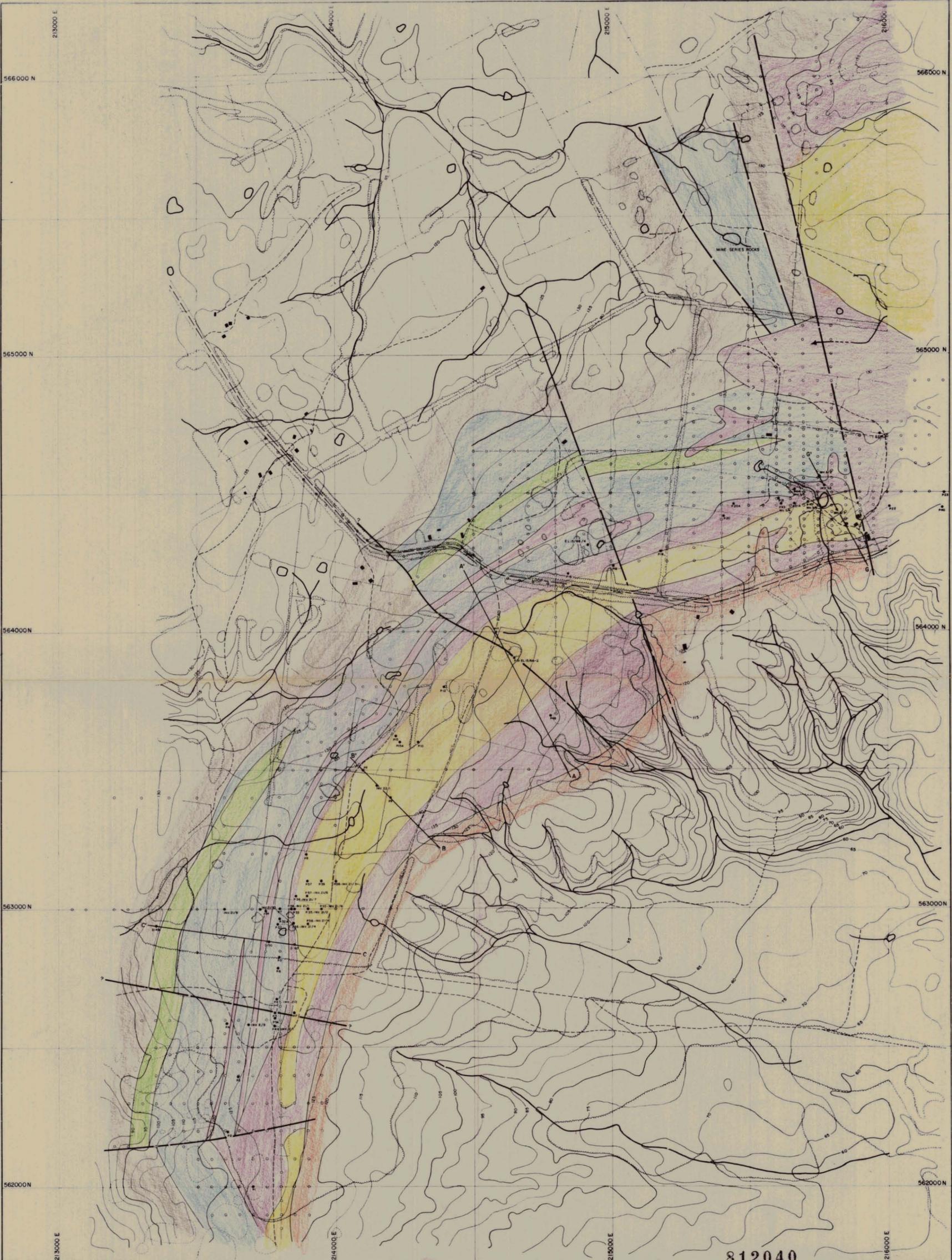
- NOTE
1. Co-ordinate system is the integrated co-ordinate system based on Australian Geodetic Datum.
 2. Level Datum is mean low water ordinary spring (MLWOS) as established by HMAS Tasmania, 1949.
 3. Compiled from aerial photographs, Tasmanian Lands Dept.



DATE: JUNE, 1974
GEOLOGIST: SGB
DRAWN: RFF
CHECKED: MCR



82-1719



812040

GEOPEKO LIMITED
KING ISLAND GROUP

No. K F4

SCALE 1:10 000

TOPOGRAPHICAL BASE MAP
SHOWING
DRILL HOLE LOCATIONS
AND
INTERPRETED GEOLOGY

KF1	KF2	KF3
KF4	KF5	KF6
KF7	KF8	KF9

- NOTE:
- Co-ordinate system is the integrated co-ordinate system based on Australian Geodetic Datum.
 - Level Datum is mean low water ordinary spring (M.L.W.O.S.) as established by H.M.A.S. Tallarook, 1949.
 - Compiled from aerial photographs, Tasmanian Lands Dept.

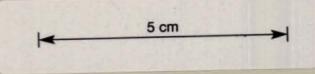


DATE: JUNE, 1974

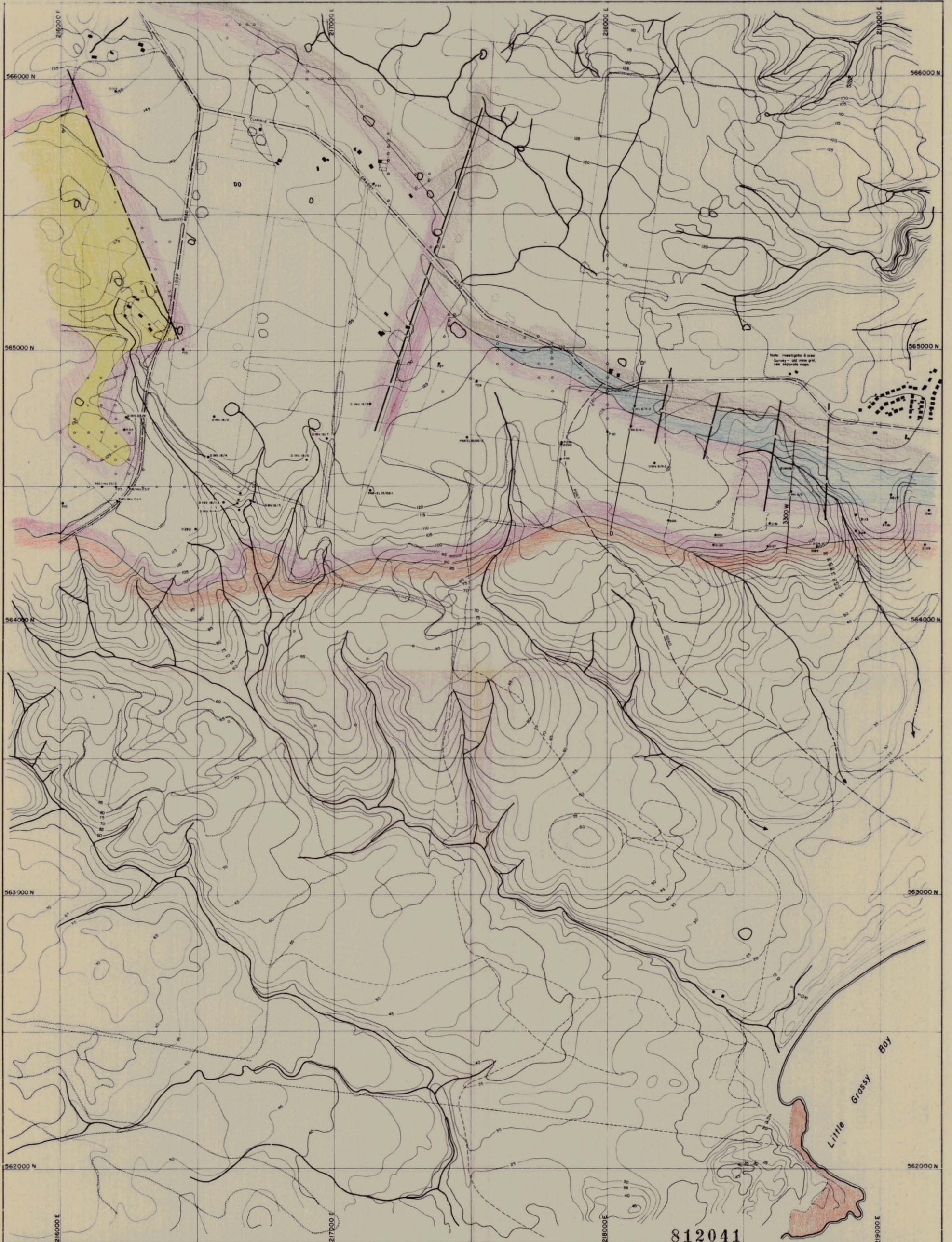
GEOLOGIST: S.G.B.

DRAWN: R.F.

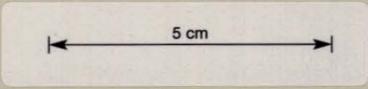
CHECKED: M.C.R.



82-1719



Note: Investigator's own
Survey - old mine grid,
see separate maps



NOTE
1. Co-ordinate system is the integrated
co-ordinate system based on Australian
Geodetic Datum
2. Level Datum is mean low water ordinary
spring (M.L.W.O.S.) as established by H.M.A.S.
Tasmania, 1949
3. Compiled from aerial photographs, Tasmania
Land Dept

DATE: JUNE, 1974
GEOLOGIST: S.S.R.
DRAWN: R.F.
CHECKED: M.C.R.

812041

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1:10,000

No. KF5

**TOPOGRAPHICAL BASE MAP
SHOWING
DRILL HOLE LOCATIONS
AND
INTERPRETED GEOLOGY**

KF1	KF2	KF3
KF4	KF5	KF6
KF7	KF8	KF9

82-1719



BASS STRAIT

812042

GEOPEKO LIMITED
KING ISLAND GROUP

No KF7

TOPOGRAPHICAL BASE MAP
SHOWING
DRILL HOLE LOCATIONS
AND
INTERPRETED GEOLOGY

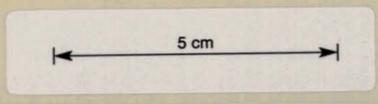
KF1	KF2	KF3
KF4	KF5	KF6
KF7	KF8	KF9

NOTE

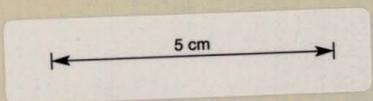
1. Co-ordinate system is the integrated co-ordinate system based on Australian Geodetic Datum
2. Level Datum is mean low water ordinary spring (M.L.W.O.S.) as established by H.M.A.S. Tallerook, 1949.
3. Compiled from aerial photographs, Tasmanian Lands Dept.



DATE: JUNE, 1974
GEOLOGIST: S.G.B.
DRAWN: R.F.
CHECKED: M.C.R.



82-1719



82-1719.

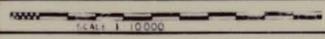
NOTE
 1. Co-ordinate system is the integrated co-ordinate system based on Australian Geodetic Datum.
 2. Level datum is mean low water ordinary spring (M.L.W.O.S.) as established by H.M.S. Tolstoy, 1949.
 3. Compiled from aerial photographs, Tasmania Lands Dept.



DATE: JUNE 1974
 GEOLOGIST: SGR
 DRAWN: KO
 CHECKED: WCR

812043

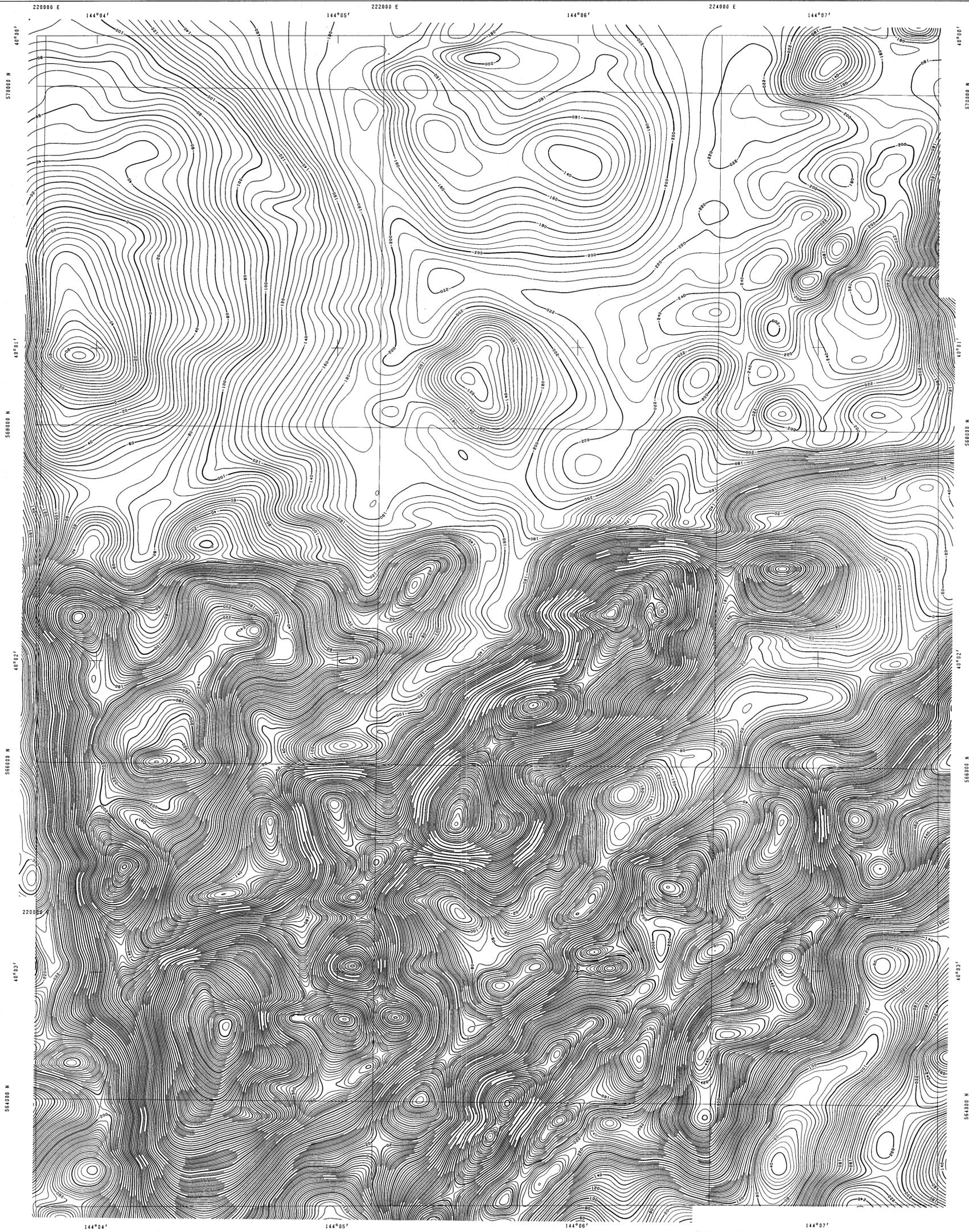
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 KING ISLAND GROUP



TOPOGRAPHICAL BASE MAP
 SHOWING
 DRILL HOLE LOCATIONS
 AND
 INTERPRETED GEOLOGY

No KFB

44	47	43
44	47	43
47	47	43



82-1719
KING ISLAND SPECIAL
GRASSY 7717-IV-NW-1

GEOPEKO



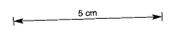
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LOCATION INDEX

7717-IV-NW

7717 -IV-NW-4	7717 -IV-NW-1
7717 -IV-NW-3	7717 -IV-NW-2



INTEGRATED SURVEY GRID
 ZONE 55/1

GRASSY

AIRBORNE GEOPHYSICAL SURVEY

Total Magnetic Intensity

FLIGHT DATA

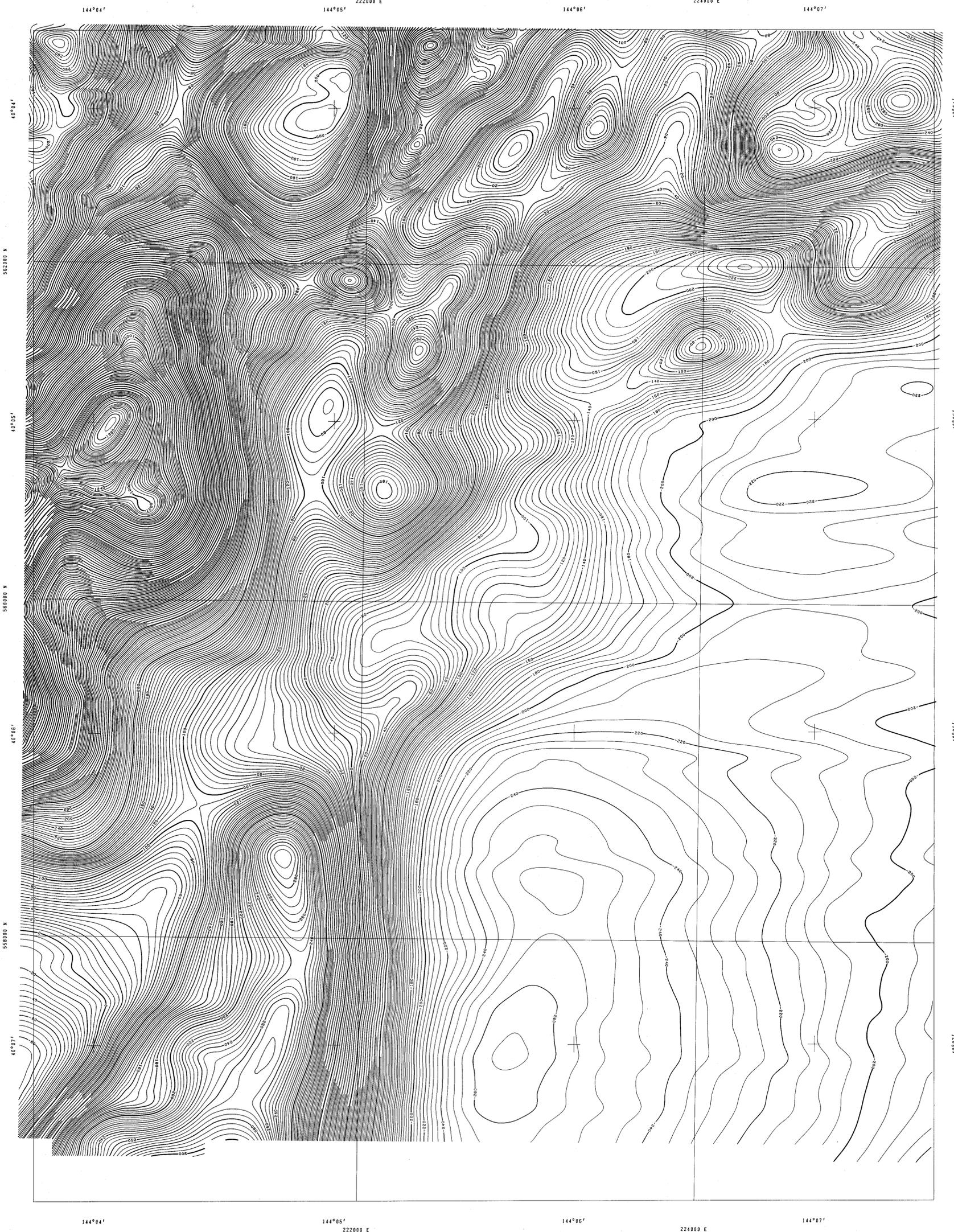
Nominal traverse line separation: 150m
 Nominal tie line separation: 1.5km
 Nominal data spacing along flight lines: 70m
 Nominal terrain clearance: 50m onshore - 15 m offshore
 Navigation and recovery using Motorola Mini-Ranger MRS-3
 Aircraft: Austrex Nomad N 22 B - Reg No: VH-FZP
 Magnetometer Type: Sonotek 6039 in stinger

Survey Date: August 1980

MAP DATA

Contour Interval: 5nT
 IGRF subtracted prior to contouring

Survey flown and compiled by Austrex International Ltd
 Project management by Geopeko geophysical group



82-1719
KING ISLAND SPECIAL
GRASSY 7717-IV-NW-2

GEOPEKO



SCALE 1:10 000



LOCATION INDEX

7717-IV-NW

7717 -IV-NW-4	7717 -IV-NW-1
7717 -IV-NW-3	7717 -IV-NW-2

NORTH

5m

INTEGRATED SURVEY GRID
 ZONE 55/1

GRASSY

AIRBORNE GEOPHYSICAL SURVEY

Total Magnetic Intensity

FLIGHT DATA

Nominal traverse line separation: 150m
 Nominal tie line separation: 1.5km
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 Navigation and recovery using Motorola Mini-Ranger MRS-3
 Aircraft: Austirex Nomad N 22 B - Reg No: VH-FZP
 Magnetometer Type: Sonotek 6039 in stinger

Survey Date: August 1980

MAP DATA

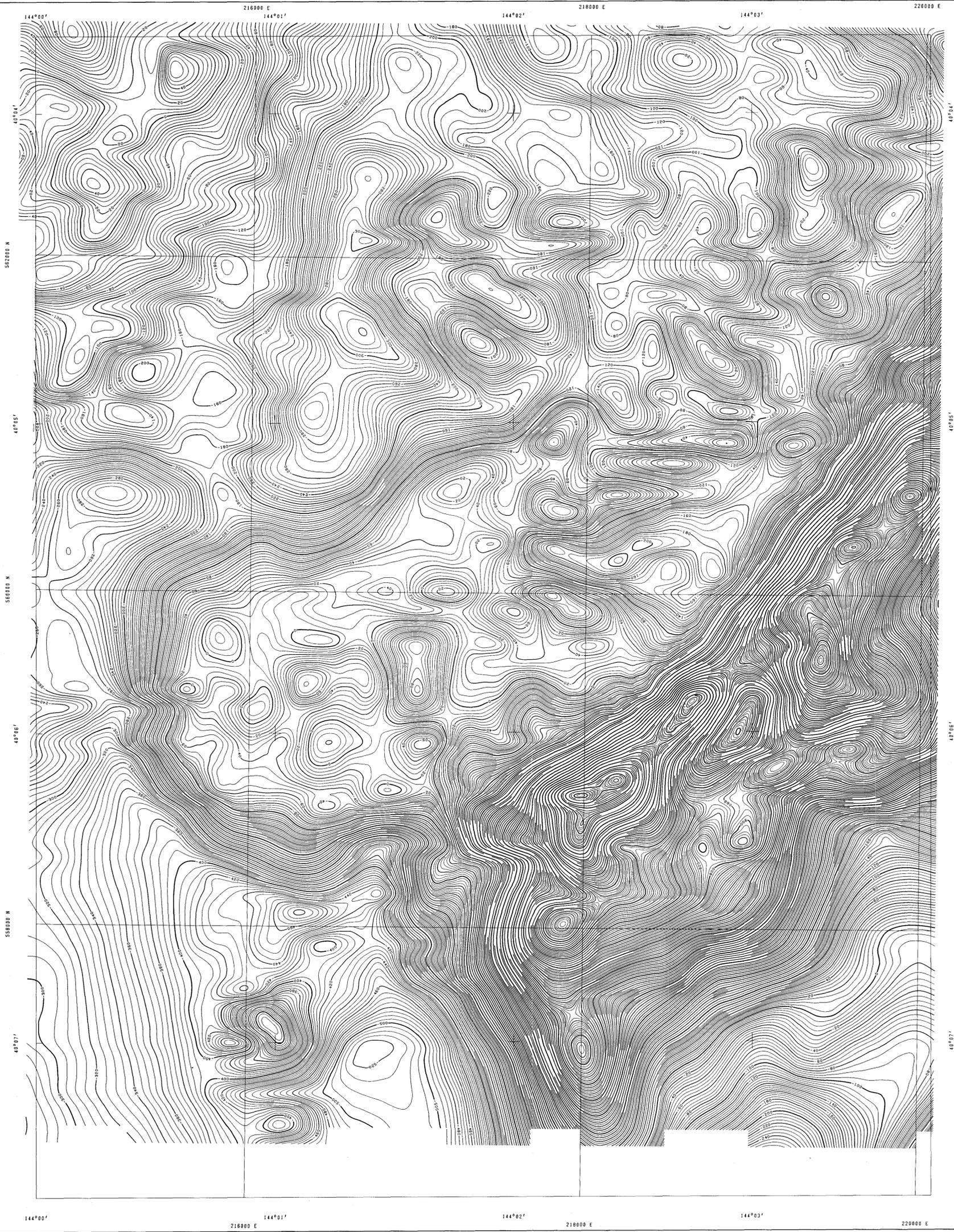
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 IGRF subtracted prior to contouring

Survey flown and compiled by Austirex International Ltd
 Project management by Geopeko geophysical group

DRAWING NO: 6 227 S/B

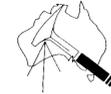
812046

6227

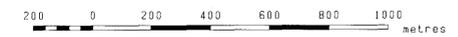


82-1719.
KING ISLAND SPECIAL
GRASSY 7717-IV-NW-3

GEOPEKO



SCALE 1:10 000



LOCATION INDEX

7717-IV-NW

7717 -IV-NW-4	7717 -IV-NW-1
7717 -IV-NW-3	7717 -IV-NW-2



INTEGRATED SURVEY GRID
 ZONE 55/1

GRASSY

AIRBORNE GEOPHYSICAL SURVEY

Total Magnetic Intensity

FLIGHT DATA

Nominal traverse line separation: 150m
 Nominal tie line separation: 1.5km
 Nominal data spacing along flight lines: 70m
 Nominal terrain clearance: 50m onshore - 15 m offshore
 Navigation and recovery using Motorola Mini-Ranger MRS-3
 Aircraft: Austirex Nomad N 22 B - Reg No: VH-FZP
 Magnetometer Type: Sonotek 6039 in stinger

Survey Date: August 1980

MAP DATA

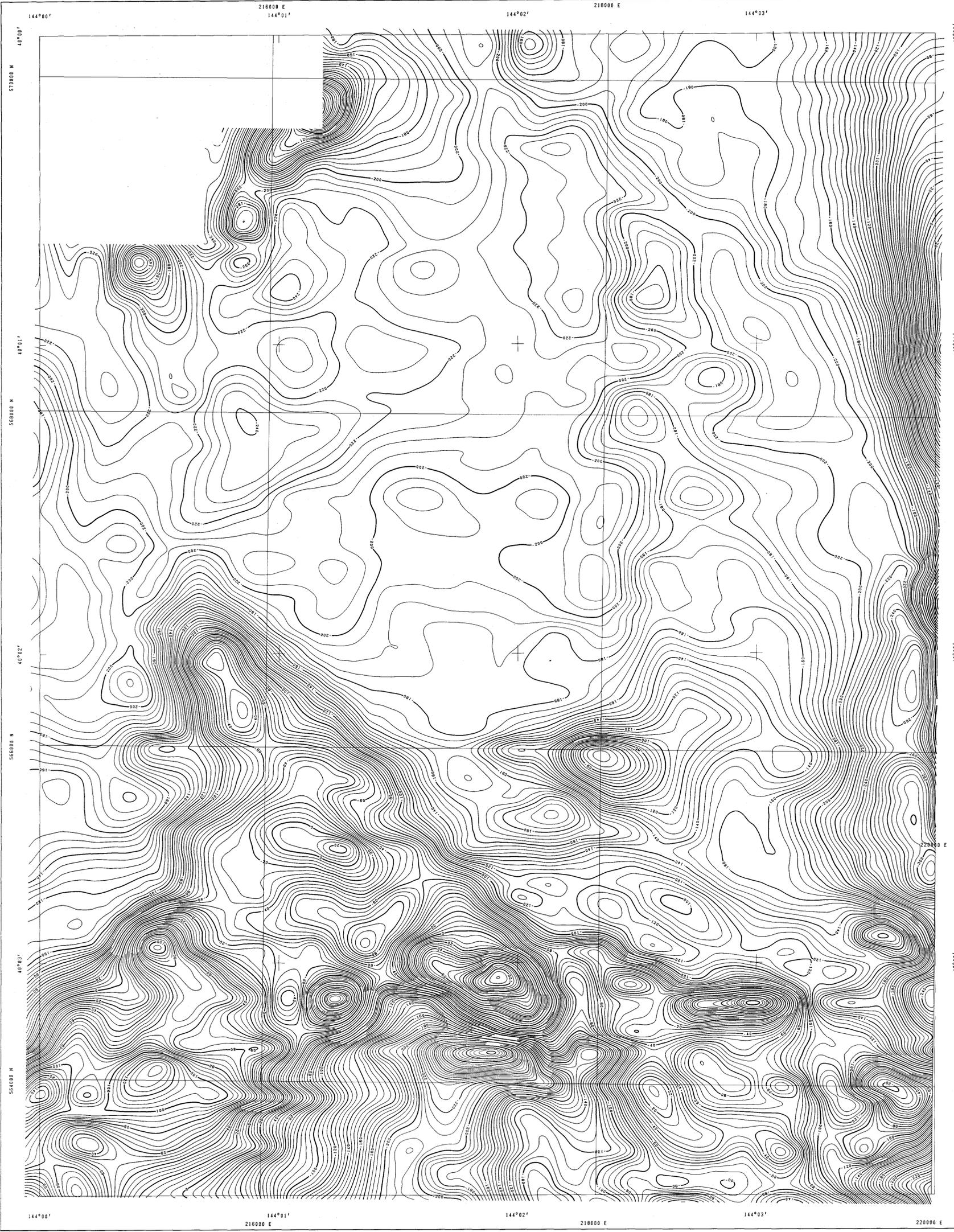
Contour Interval: 5nT
 IGRF subtracted prior to contouring

Survey flown and compiled by Austirex International Ltd
 Project management by Geopeko geophysical group

DRAWING NO: 6 228 S/B

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6228



82-1719
**KING ISLAND SPECIAL
 GRASSY 7717-IV-NW-4**

GEOPEKO



SCALE 1:10 000



LOCATION INDEX

7717-IV-NW

7717 -IV-NW-4	7717 -IV-NW-1
7717 -IV-NW-3	7717 -IV-NW-2

NORTH ↑



INTEGRATED SURVEY GRID
 ZONE 55/1

GRASSY

AIRBORNE GEOPHYSICAL SURVEY

Total Magnetic Intensity

FLIGHT DATA

Nominal traverse line separation: 150m
 Nominal tie line separation: 1.5km
 Nominal data spacing along flight lines: 70m
 Nominal terrain clearance: 50m onshore - 15 m offshore
 Navigation and recovery using Motorola Mini-Ranger MRS-3
 Aircraft: Austirex Nomad N 22 B - Reg No: VH-FZP
 Magnetometer Type: Sonotek 6039 in stinger

Survey Date: August 1980

MAP DATA

Contour Interval: 5nT
 IGRF subtracted prior to contouring

Survey flown and compiled by Austirex International Ltd
 Project management by Geopeko geophysical group

DRAWING NO: 6 229 S/B

812048

6229