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Geopeko - King Island

**OPEN FILE**

Report No. K.I. 82/4

**MICROFILMED**

Progress Report EL 39/80 Twelve Months  
to 15th November, 1982

S. Grieve Brown

82-1879

C O N T E N T S  
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INTRODUCTION

WORK CARRIED OUT DECEMBER 1981 TO NOVEMBER 1982

COMMENTS

FUTURE WORK PROGRAMME

EXPENDITURE

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INTRODUCTION

Exploration Licence 39/80, first granted in June 1981 is held by Warman Services Limited in respect of an area of 105 square kilometers in the Reekara area of north central King Island.

This licence covers the known area of occurrence of mineralised quartz tourmaline veins at Reekara and lies west of the Devonian Carboniferous Mt. Council Granite. Also included in the area is the old Story's Creek alluvial tin workings.

Due to the current financial situation, with regard to tungsten, progress on this project has been slow.

The purpose of this report is to compile and record all exploration work carried out within the licence area since the last report in December, 1981.

WORK CARRIED OUT

During the past twelve months the work carried out on this area has consisted of:-

- 1) The Landsat photo of the island was obtained and examined for photo linear trends. Due to the problems of cloud cover the photo obtained, which showed the whole island free of cloud, was dated 25th October 1980. Unfortunately this is rather late in the climatic cycle and considerable drying out of all the vegetation had occurred reducing the anticipated contrasts which were expected due to better water availability associated with faulted ground.

Therefore it appears that the best results have been obtained from the original black and white photos as reported last time.

- 2) Survey lines were established on a regional scale over the area. Three lines totalling 40 line kilometers were established, alongside existing roads where possible, with stations spaced 100 metres apart.
- 3) Geophysical surveys for ground gravity and Very Low frequency response were carried out along the survey lines, but results of this work <sup>are</sup> ~~is~~ not yet to hand.

COMMENTS

The object of the exploration programme is to assess the potential for the presence of a Mt. Carbine type mineralised vein swarm.

At the current time it is felt that the major localising features which contributed to the formation of the Mt. Carbine deposit were the presence of a source rock, the Mareeba granite which underlies the whole area, and a major shear which severely disrupted the rocks and allowed emplacement of the quartz veins within the area adjacent to the fault.

The presence of a Devonian-Carboniferous granite considered to have mineralising potential, the Mt. Council Granite occurs to the West of the area of known quartz veins. The current gravity survey is designed to provide sufficient data to allow an assessment to be made of the presence or absence of a subsurface extension of this granite under the zone of interest.

The presence of a major shear structure, the northern extension of the Grassy River Fault, is inferred from the photo linear study previously reported. The V.L.F. survey is designed to test this interpretation by defining possible locations of these and other faults on the ground.

FUTURE WORK PROGRAMME

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

- 1) Compute and assess the results of the regional Gravity and V.L.F. surveys which have been carried out over the area.
- 2) Should the V.L.F. work succeed in locating the major shears interpreted from the air photos then consideration will be given to extending this type of survey both north and south of the current zone of interest.
- 3) Should encouraging results be obtained from the gravity survey consideration will be given to closing up the spacing of the lines to allow better definition of any anomalies to be obtained.

The actual amount of this work which is completed will be dependent to an extent on the economic climate as would be expected.

Diamond drilling to test the extent of any deposit to depth would only be undertaken if the cost<sup>e</sup>n work showed the potential for a viable economic deposit.

EXPENDITURE ON E.L. 39/80

Twelve months to 30th November, 1982

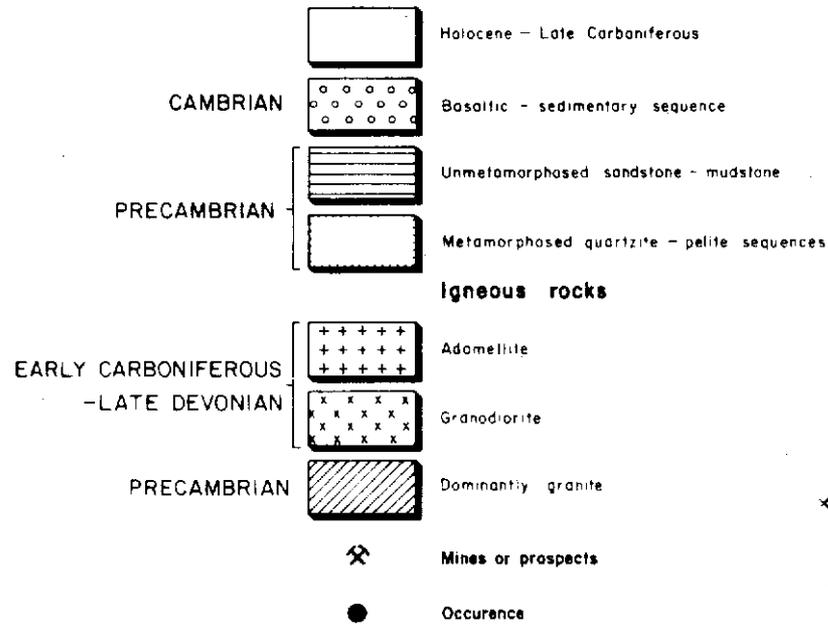
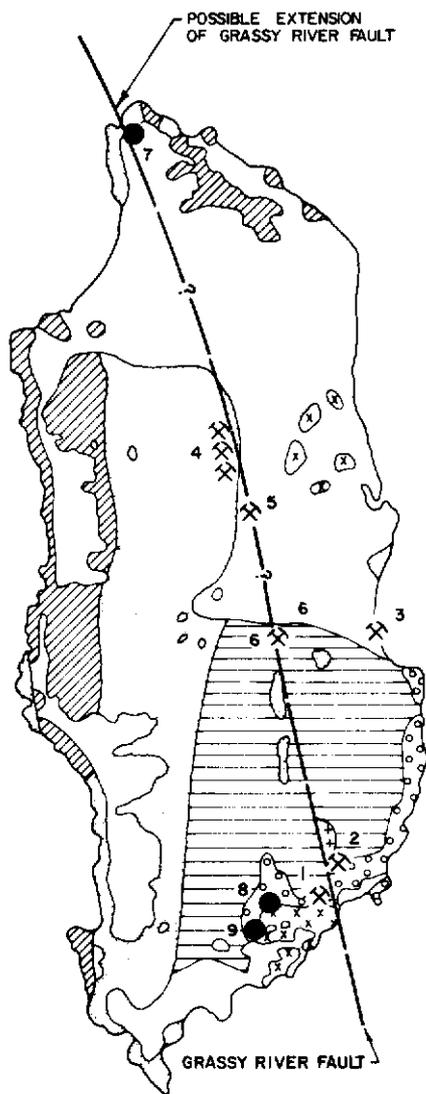
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Geophysics	\$3 522.00
Survey	\$1 476.00
Field Expenses	\$ 849.00
Administration	\$ 670.00
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S. Grieve Brown  
Supervising Geologist  
KING ISLAND

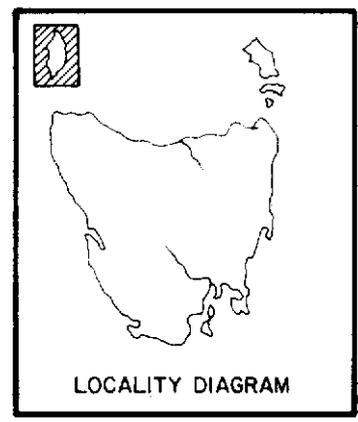
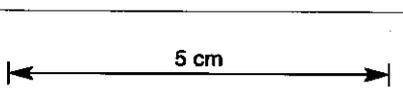
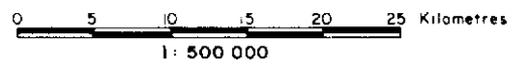
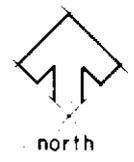
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- Cottam P. 1971 Final Report EL 4/68. Unpublished Company Report.
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- Gresham J. J. 1972 Regional Geology of King Island. Unpublished Company Report.
- Hughes T. D. 1955 J. Curtain's Scheelite Prospect. Unpublished Mines Department Report.
- Mining Magazine Jan. 1976 Photometric Ore Sorting at Mt. Carbine Wolfamite Mine, Queensland.
- Brown S. G. 1981 Six Monthly Report To The Mines Department. Report No. KI/81/5



1. DOLPHIN/Nº1 OREBODY - W, Mo
2. BOLD HEAD - W, Mo
3. NARACOOPA - Beach Sands
4. REEKARA - W, Sn
5. HAWKES ALLUVIAL - Sn, W
6. FRASER RIVER - Au
7. VICTORIA COVE - W
8. LOOP ROAD - W, Mo
9. INVESTIGATOR 21 - W, Mo

**Igneous rocks**



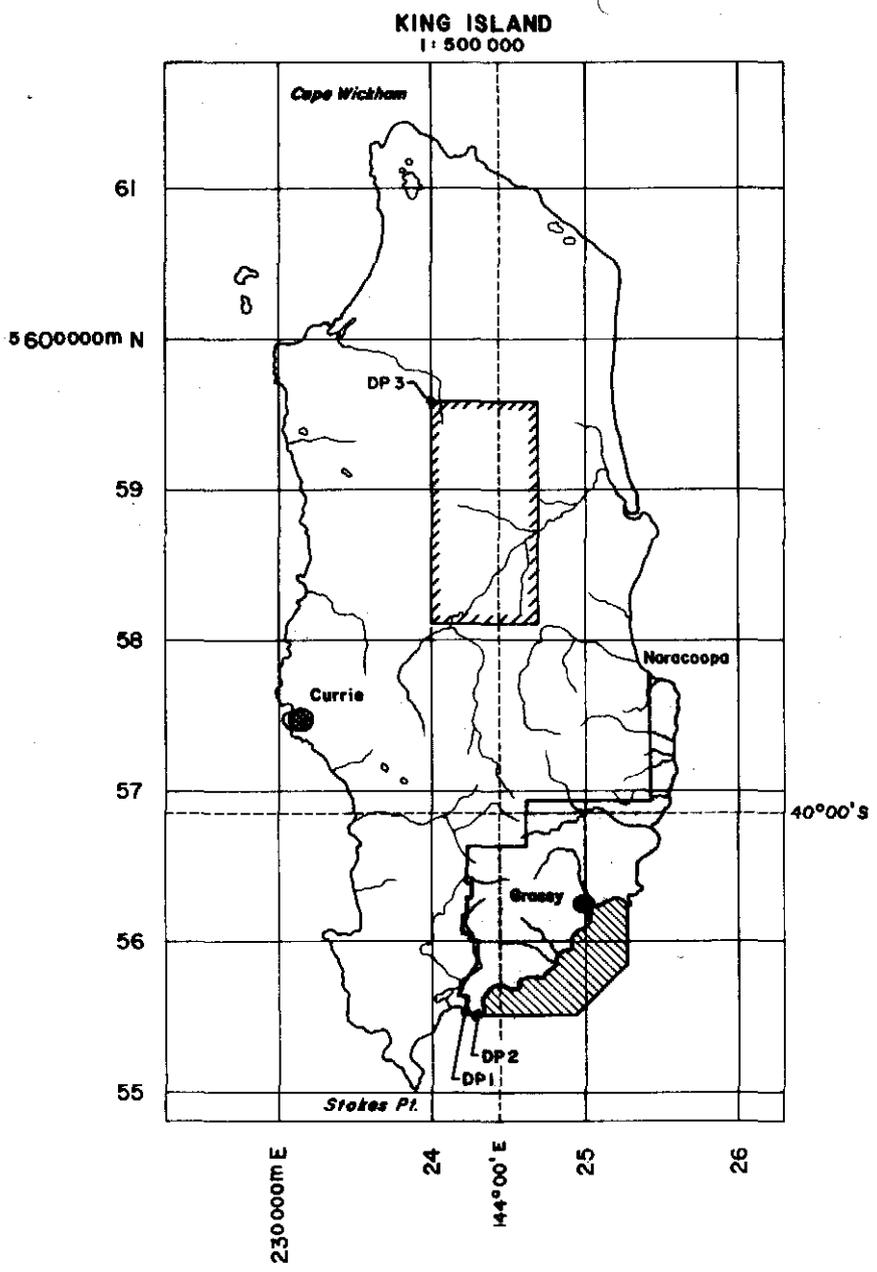
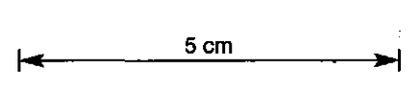
KING ISLAND GEOLOGICAL MAP  
FIGURE 1

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666010

FIGURE 2  
COMPANY EXPLORATION LICENCES - KING ISLAND

-  E.L. 15/66
-  E.L. 21/78
-  E.L. 39/80



DATA POINTS (DP) CO-ORDINATES

DP1 - E.L. 15/66:	5 555 260m N	241 330m E
DP2 - E.L. 21/78:	5 555 000m N	242 000m E
DP3 - E.L. 39/80:	5 596 000m N	240 000m E

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25 MAR 1982

D of M	A.O.	C.G.	E.O.	D.S.M.E
				Registrar
Received	25 MAR 1982			E & IL
Answered				
DEPT. OF MINES				
REF. No.				

WARMAN SERVICES LIMITED

E.L. 39/80

QUARTERLY REPORT

to the Mines Department

Quarter ended 10. 3.82

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PROGRESS REPORT EL 39/80

Quarter ended 10. 3.82

General

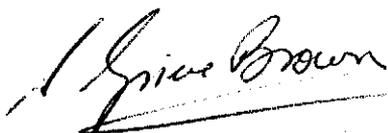
During the past quarter work on this licence has concentrated on the commencement of a regional ground gravity survey over the area of potential and its surrounds.

Progress to Date

Three lines were established over the Reekara area along three of the roads and extending from the West Coast Precambrian Granite to the Mt Council Granite on the East Coast.

To date about 80% of the grid has been completed for gravity but some difficulties have been encountered due to the bush fire which burnt out a portion of the grid in the north east of the area. This will necessitate re-establishment of the grid prior to completion of the gravity readings. The portion of the lines completed to date are shown on the attached plan.

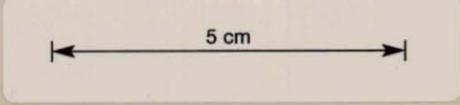
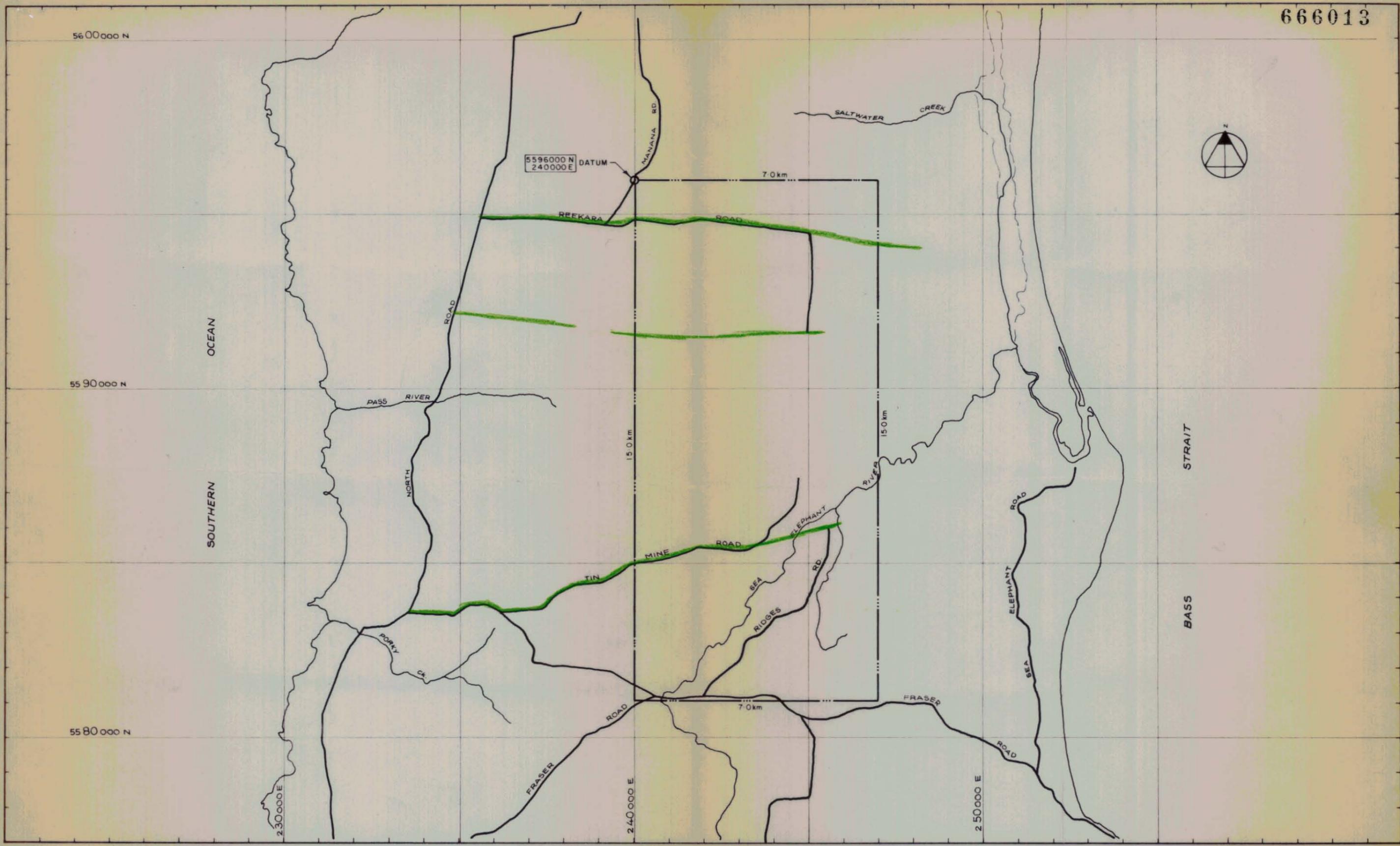
It is intended to complete the survey in the first week of April and that interpretation of the results will be completed by the end of the financial year.



S. Grieve Brown  
SUPERVISING GEOLOGIST

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666013



REF PLAN - LANDS DEPT. MAP KING IS. (SPECIAL) 1:100,000 TOPOGRAPHICAL  
 GRID REFERENCE - AMG. ZONE 55  
 - - - - - E.L. 39/80 BOUNDARY  
 ██████████ GRAVITY SURVEY GRID LINE [COMPLETED]

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

SCALE 1:100,000

**KS** KING ISLAND SCHEELITE  
GRASSY KING ISLAND

**E.L. 39/80**

DRAWING NUMBER