GEOPEKO LIMITED

KING ISLAND

REPORT No. KI/74/6

FINAL REPORT ON THE MINERAL POTENTIAL OF

OF EXPLORATION LICENCE 5/69

by

S. GRIEVE BROWN

KING ISLAND AUGUST, 1974.

AMG REFERENCE POINTS ADDED

CONTENTS

	Page
List of Plans	1.
Introduction	2.
Summary	3.
Conclusions	4.
Recommendations	4.
Action Sheet	5.
Geophysics	6.
Geology	7.
Economic Geology	9.
Bibliography	11.
Appendix 1 Log of P.D.H. INV. 19-1	12.
Appendix 2 Log of P.D.H. W.B. 2	13.

002

LIST OF PLANS

Geological Plan Exploration Licence 5/69		1:63360
Magnetic Anomaly No. 3. Geology, Geochemistry and Magnetic Profile		1:2500
Investigator 19 / Magnetic Anomaly 2	Geology	1:5000
	Total Geochemistry	1:5000
	Lead Geochemistry	1:5000
	Zinc Geochemistry	1:5000
Geological Legend.		
Map of Northern King Island showing Aeromagnetic Contours		1:25000
Geological Log and Geochemistry P.D.H. INV. 19-1.		
Geological Log and Geochemistry W.B. 2.		

INTRODUCTION

Exploration Licence 5/69 covers an area of 1.5 square miles in the north west of King Island and is due to expire on 14th September 1974.

The area covered by this licence has been reduced in stages from the initial 116 square miles applied for in March 1969. The major portion of the area was relinquished in March 1972.

The following exploration programme was conducted within the licence area up until March 1972.

- Base map compilation from aerial photographs scale 1:12000.
- Regional photo controlled geological mapping at an approximate scale of 1:12000.
- A regional geological and geochemical sampling programme involving gemco auger drilling to bedrock.
- Detailed hand and gemco auger drilling on the Investigator's 11 and 12 grids.

The results of this programme have been reported in 'Progress Report on E.L. 5/69 by P. Cottam, March 1972. It was concluded that the geological environment was unfavourable for the occurrence of economic mineral deposits within the southern portion of E.L. 5/69 and that area should be relinquished.

This report records the results of the exploration programme undertaken within the retained northern portion of E.L. 5/69 since March 1972. During this period the following exploration programme has been conducted.

- A regional geochemical sampling programme involving gemco auger drilling to bedrock (38 holes, 276.75 m).
- Close spaced gemco auger drilling on the Investigator 19 grid.
- An airborne radiometric and aeromagnetic survey.
- Evaluation of the three magnetic anomalies delineated by the airborne survey involving ground magnetic traverses and limited auger drilling
- One percussion drill hole (P.D.H. 19-1) drilled to 30.5 metres.

SUMMARY

Following the discovery of the Investigator 19 Pb/Zn prospect during the regional bedrock geochemical programme a further 38 gemco holes (276.75 m) were drilled in the regional geochemical sampling programme. Although this closer spaced programme confirmed the original anomalous results no other geochemically anomalous areas were located. The area of sampling was restricted by the road and track system within the licence.

Auger drilling on the Investigator 19 grid defined an area of low anomalous Pb/Zn values occurring in a chlorite muscovite schist zone within the meta-sediment sequence. The higher values (up to 3100 ppm Zn and 3500 ppm Pb) recorded in some holes were due to galena and sphalerite occurring in quartz veins which locally transect the chlorite muscovite schist.

The possible relationship between the olivine basalt at Magnetic Anomaly 2 (E.L. 20/73) and the Pb/Zn mineralization at Investigator 19 was examined and from the geochemical and geological evidence it is concluded that the olivine basalt plug is not associated with the Pb/Zn mineralization.

Besides magnetic anomaly No. 2 (E.L. 20/73) the aeromagnetic survey delineated two other spot highs (magnetic anomalies 3 and 15) and one distinct but broad linear anomaly trending approximately north - south. No meaningful results were obtained from the radiometrics.

The spot magnetic anomalies have similar characteristics to others (magnetic anomalies 2, 4, and Investigator 12) which were tested along with magnetic anomaly 3, by auger drilling. The source of these anomalies has been shown by bedrock auger drilling, to be due to olivine basalt plugs containing disseminated magnetite. Auger drilling across the contacts of these basalt plugs has shown no anomalous geochemical trends indicative of introduced mineralization.

CONCLUSIONS

1. The mineral potential of E.L. 5/69 excluding the anomalous magnetic features and the Pb/Zn mineralization at Investigator 19, has been adequately evaluated prior to March 1972. (Progress report E.L. 5/69 by P. Cottam)

2. The intense circular anomalies (No's 3 and 15) are considered to be due to magnetite rich olivine basalt plugs similar to others (anomalies 2 and 4) located in the north of King Island.

3. By comparison with the other magnetic anomalies whose sources were located and tested for mineralization it is reasonable to assume that the source of magnetic anomaly 15 will also be barren of introduced mineralization. (The contact of magnetic anomaly No. 3 was tested by auger drilling.)

4. It is considered that the probable source of magnetic anomaly No. 17 is a series of basic dykes intruded into the meta-sediments.

5. The Pb/Zn mineralization at Investigator 19 is restricted to the chlorite mica schist unit, the enrichment of these elements is only significant in secondary quartz veins, and is considered not to have any economic potential.

RECOMMENDATIONS

It is recommended that no further work be carried out and that this Exploration Licence be allowed to expire.

ACTION SHEET

Hello.

007

567008

AMG REFERENCE POINTS ADDED

AMG 252920mE, 5604900mN

KING ISLAND

AREA OF E.L. 5/69 RELINQUISHED 14-3-74

AREA OF E.L. 5/69 RETAINED EXPIRES 14-9-74

CURRIE

AREA OF E.L. 5/69 RELINQUISHED 14-3-72 (PREVIOUSLY REPORTED)

GRASSY

AMG 232100mE, 5860580mN

AREA OF E.L. 5/69 RELINQUISHED 14-9-71 (PREVIOSLY REPORTED)

5 cm

LOCATION MAP
E.L. 5/69

GEOPHYSICS

The Exploration Licence (as at 1-1-73) was flown for magnetics and radiometrics during February 1973. The contract was carried out by Canadian Aero Services on behalf of Geopeko Limited.

No meaningful results were obtained from the radiometric survey.

Two intense circular magnetic anomalies (anomalies 3 and 15) were located within the licence area. Ground magnetometer traverses were carried out over both these anomalies which have similar characteristics, being intense magnetic highs with circular shape.

The source of anomaly No. 3 was shown by auger drilling to be due to an intruded plug of magnetite rich olivine basalt, similar to other such plugs occurring in the north of the Island.

The linear magnetic anomaly in the south west of the licence area (anomaly No. 17) is considered to have as its source a series of basic dykes which intrude the meta-sediments in this area.

GEOLOGY

The geology within Exploration Licence 5/69 consists mainly of meta-sediments with minor areas of West Coast granite overlain for the most part by a variable thickness of recent sands and gravels.

Geological mapping was carried out at a scale of 1:12000 on photo controlled regional base maps obtained from aerial photos (taken in 1967) using the slotted template method of photo laydown.

The West Coast granite is composed of a series of granitic rocks mainly adamellites and granodiorites with porphyritic biotite granite and includes areas of granitized sediments. This unit is locally known as the West Coast granitic complex.

No outcrops of this granite occur within the licence area but it is well exposed along the length of the west coast and is normally a light grey medium grained weakly foliated granite with granular quartz and feldspar as its principal constituents. Lenticular xenoliths of basic material commonly occur within the granite.

Based on potassium argon dating of the micas (McDougal & Leggo) the granite is considered to be of Precambrian age with 715 m.y. regarded as the minimum age of emplacement.

The mica schists consist of quartz-muscovite-chlorite assemblages, derived by green schist facies metamorphism of a fine grained silty quartz sandstone and are regarded as being of Precambrian age. From samples obtained during drilling of these meta-sediments it is apparent that they range in type from very well laminated mica schists to uniform micaceous quartzites. Since these rocks are not exposed in outcrop and are only encountered in drill holes or as float material their structure is not known. There is some evidence, from inspection of the aeromagnetic contours that these rocks strike approximately north - south and dip steeply to the west.

Geologically the Investigator 19 area lies at the contact between a chlorite mica schist unit of the meta-sediments and the West Coast granite. The Pb/Zn mineralization is confined to the chlorite mica schist and transecting quartz

veins. The West Coast granite and surrounding chlorite poor mica schists showing only low (background) geochemical values for Pb and Zn. A thin section of the chlorite mica schist shows it to be a quartz-chlorite-muscovite schist well foliated with elongated detrital quartz grains and large muscovite flakes in a fine schistoze matrix. Fine grains of tourmaline, rutile and apatite are present in some layers.

It is considered that this rock is derived by greenschist facies metamorphism of a fine grained, silty and probably argillaceous, quartz sandstone.

The sphalerite and galena are confined to a single layer about 15 mm wide and as there is no apparent evidence that they may have been introduced they are regarded as being of syngenetic origin.

The olivine basalt plugs (magnetic anomalies No's 3 and 15) of Tertiary? age are intruded into mica schists and consist of fine serpentinized olivine crystals in a matrix of microcrystalline pyroxene hornblende and volcanic glass. Clouds of dispersed magnetite are present in the matrix.

Recent fossiliferous limestone and ironstained (limonitic) consolidated sands occur in some areas.

ECONOMIC GEOLOGY

There is no known economic mineralization within the licence area. Minor Pb/Zn mineralization occurs in quartz veins transecting the mica schists in the south west of the E.L. (Investigator 19).

Visible galena and spalerite occur in quartz veins transecting the mica schists (as shown by percussion drilling) and it is considered that the mineralization is probably derived from the syngenetic sulphides occurring within the mica schists themselves. Petrographic examination of a thin section of the mica schist showed traces of galena and sphalerite confined to a single layer 15 mm wide. No disruption of the layer is apparent and there is no apparent evidence for the introduction of these sulphides.

The lack of any suitable host rocks and the low geochemical values for Pb and Zn present in the mica schist make it unlikely that this occurrence possesses any economic significance.

Bedrock geochemical sampling of the olivine basalt (magnetic anomaly 3) and the surrounding contact mica schists was carried out by auger drilling (11 holes, 93.26 metres of drilling) with no significant values being recorded for any of the elements assayed (Cu, Pb, Zn, Ni, Co, Cr, V). The possible relationship between magnetic anomaly No. 2 (E.L. 20/73) and the Pb/Zn mineralization at Investigator 19 was examined. It was reasoned that if the mineralization at Investigator 19 was associated with the olivine basalt plug at anomaly No. 2 then the mineral potential of the contact areas of the other basalt plugs on the Island would be considerably increased.

Auger drilling west of the Investigator 19 grid showed a very rapid drop off of Pb/Zn values away from the contact between the mica schists and the granite. It is considered likely that the anomalous Pb/Zn values are confined to a chlorite muscovite zone in the mica schists.

No anomalous geochemical trends were recorded from auger drilling in the granite and it is considered that the Pb/Zn mineralization at Investigator 19 is derived from within the mica schist unit and is not related to the olivine basalt plug intruded into the granite at magnetic anomaly 2.

Other basalt plugs tested elsewhere on the Island gave similar results and it is concluded that these plugs have no associated mineralization.

Although tin mineralization is known to occur in a series of small quartz veins, exposed in pits, to the east of the E.L. no evidence for areas of tin mineralization was recorded during the exploration programme. All auger drill samples were analysed for tin but only values up to 35 ppm Sn were obtained.

An assessment of the tin bearing potential of the King Island granites, (J. J. Gresham & P. Cottam 1971) concluded that all the granites were geochemically outside the parameters obtained by analysis of most of the tin bearing granites of the world.

Although Geopeko Limited has not carried out any testing of the sand deposits specifically for heavy mineral deposits no evidence of such deposits was encountered in the auger drilling programme. The sand cover within the licence area is relatively shallow and does not appear to have been subjected to the amount of reworking that the dunal areas have had. It is considered that the potential for economic heavy mineral deposits is small.

GEOPEKO LIMITED

S. Grieve Brown

S. Grieve Brown
GEOLOGIST.

BIBLIOGRAPHY

Brown, S.G., June 1974. Final Report on the Mineral Potential of E.L. 20/73. Unpublished Geopeko Ltd. Company Report.

Cottam, P., April 1971. Final Report E.L. 4/68. Unpublished Geopeko Ltd. Company Report.

Cottam, P., March 1972. Progress Report E.L. 5/69. Unpublished Geopeko Ltd. Company Report.

Gray, D., February 1970. Granites of the West Coast of King Island. Geopeko Ltd. Technical Seminar, 13th Feb. - 20th Feb. 1970.

Gresham, J.J., May 1972. Regional Geology of King Island. Unpublished Geopeko Ltd. Company Report.

Hawkes, H.E., and Webb, J.S., 1962. Geochemistry in Mineral Exploration. Harper & Rowe Publishers.

Hoskings, K.F.G., 1965. The Search for Tin. Min. Mag. Vol. 113 No's 4, 5 and 6.

Jannink, A., September 1969. Report on Exploration Licences 4/69 and 5/69 Stage 1.

March 1970. Report on Exploration Licences 4/69 and 5/69 Stage 2.

September 1970. Report on Exploration Licences 4/69 and 5/69 Stage 3.

Unpublished Reports of Anthony, McKenna & Partners Pty. Ltd., plus Appendices.

Jennings, J.N., 1959. The Coastal Geomorphology of King Island, Bass Strait in Relation to Changes in the Relative Level of Land and Sea. Queen Victoria Museum, Launceston Records New Series.

King Island Scheelite Limited Geological Dept., May 1968. Geological Report on Exploration Areas North East King Island. Unpublished K.I.S. Report.

Le Messurier, P., and Lister G., 1970. Progress Report E.L. 23/69. Unpublished Geopeko Ltd. Company Report.

Mayer, W., March 1971. Geological Progress Report E.L's 4/69 and 23/69. Unpublished Geopeko Ltd. Company Report.

McDougall, I., and Leggo, P.J., 1965. Isotopic Age determinations on Granitic Rocks from Tasmania. J. Geol. Soc. Aust. Vol. 12 pp 295 - 332.

APPENDIX 1

LOG OF P.D.H. INV. 19-1

0 - 25' SANDY SOIL

Initially the material is quite loamy but from 5' onwards it comprises a coarse sand with some soil present. The colour changes down the hole from a deep brown at surface to a more grey brown at 25'.

25 - 40' SAND

A grey probably granite derived sand with large amounts of small well rounded quartz chips which are extremely smooth and worn to 40'. Minor feldspar chips are also apparent and traces of muscovite are also present. Quite large amounts of clay are present in these samples and this would appear to be a compact unit difficult to auger drill.

40 - 60' DECOMPOSED MICA SCHIST

A silvery green coloured clay unit with very small chips of green silver mica schist present.

On the 50 - 55' sample some minor mineralization is present while minor vein quartz is seen in the 55 - 60' sample.

60 - 80' WEATHERED MICA SCHIST

A very light grey green mica schist as above but in these samples the chips are more common. In some areas the hammer has made rock flour out of mica schist.

80 - 100' QUARTZ MICA SCHIST

A slightly darker grey green quartz mica schist. There are still quite large amounts of less quartz rich mica schist present here.

E.O.H. 100'

APPENDIX 2

LOG OF P.D.H. W.B. 2

Hole Number:-	W.B. 2	Date:-	28-2-74.
Landowner:-	L. Best		
Block:-	R2	Parish:-	Reekara
Location:-	As per Map		

0 - 5' SOIL

Orange sandy clay.

5 - 10' VEIN QUARTZ

White vein quartz with white clay derived from weathered micaceous rocks.

10 - 20' CLAYS

Light grey clays slightly sandy, derived from the underlying mica schists.

20 - 60' MICA SCHISTS

Grey silver mica schists of the Reekara type with a very high muscovite content. The first 5 feet of the unit is weathered and has a high clay content.

60 - 100' QUARTZ MICA SCHISTS

A series of dark grey quartz muscovite schists. These rocks retain their schistoze nature even though quite considerable amounts of quartz is visible in the chips.

100 - 120' QUARTZ MICA SCHISTS

This unit consists of much harder chips of a reddish grey quartz mica schist. There is a higher quartz content here and both this unit and the one above are much more compact than the unit from 25 - 60'.

The overall appearance of this unit is however still quite schistoze.

120 - 150' MICA SCHISTS

These mica schists are dark grey-silver in colour and have much larger muscovite flakes present in them than occur in the quartz mica schists.

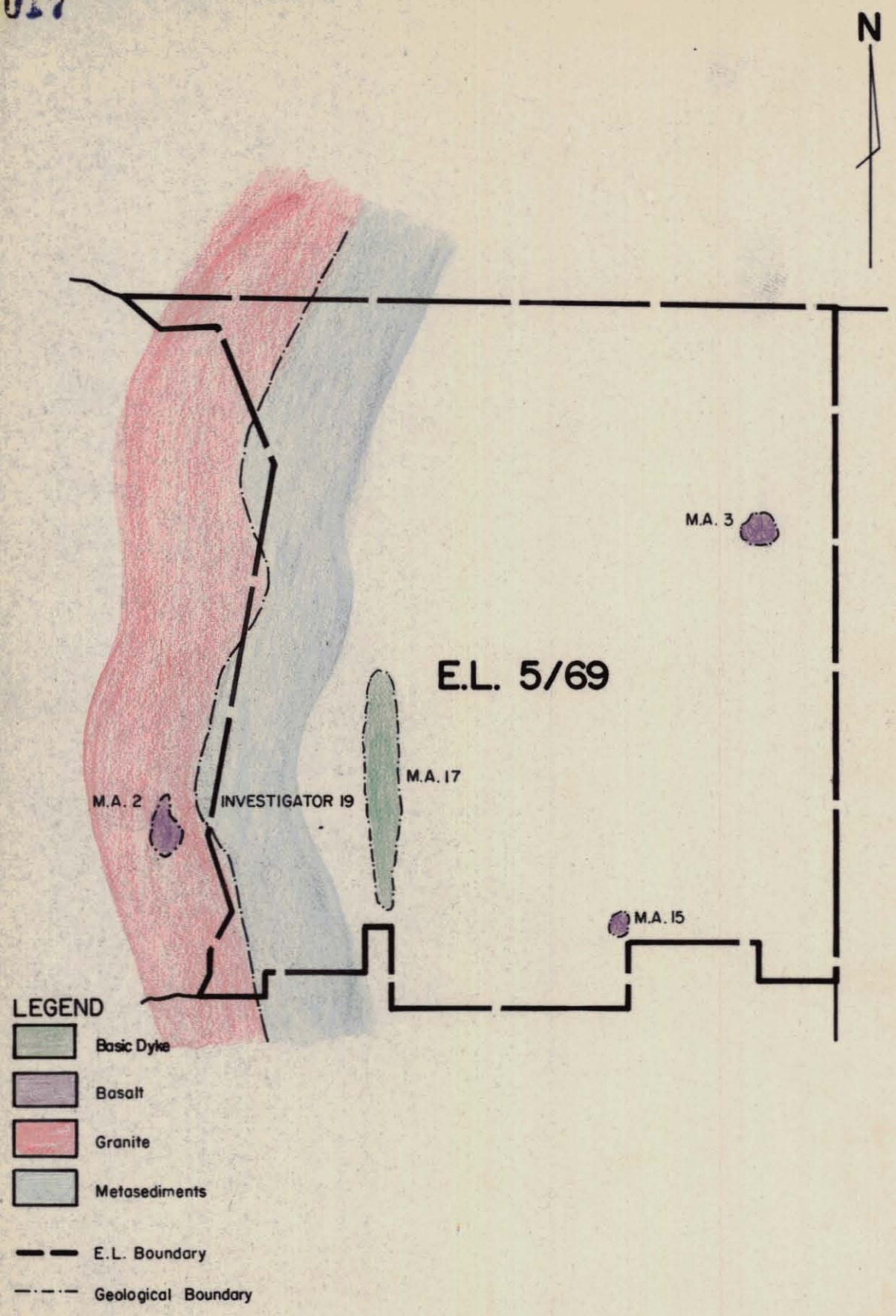
150 - 160' QUARTZ MICA SCHISTS

Grey black quartz mica schists similar to those occurring between 60 and 100 feet.

E.O.H. 160'

567018

017



E.L. 5/69
GEOLOGICAL INTERPRETATION MAP

SCALE 1" = 1mile

5 cm

200 W | 00E | 200E | 400E

00 S

200 S

400 S

600 S

Mica Schist 3835 | Mica Schist & Micaceous Quartzite 3832 | Mica Schist 3831 | Mica Schist 3825 | Mica Schist 3826 | Quartzite & Micaceous Quartzite 3830 | Basalt & Magnetic Schist 3827 | Basalt & Quartzite 3828 | Mica Schist 3829 | Grey Mica Schist (magnetic) 3833 | Basalt & Magnetic Schist 3834

GEOCHEMISTRY RESULTS

	V	Cu	Pb	Zn	Ni	Co	Cr
3825	<10	65	<20	65	55	10	120
3826	<10	75	<20	70	25	5	30
3827	10	30	<20	90	340	35	290
3828	10	35	<20	100	330	30	230
3829	10	20	<20	70	40	10	30
3830	<10	40	<20	65	30	<5	45
3831	20	95	<20	120	25	5	70
3832	<10	100	<20	120	35	10	200
3833	<10	35	<20	65	20	5	15
3834	10	45	<20	130	520	80	210
3835	20	75	<20	60	20	5	20

o Grid pegs

● Auger holes

Magnetic profile along 250mS. 1cm = 20 gamma (vert)

5 cm

74-1043

DATE: AUG '74

GEOLOGIST: S G B

DRAWN K D.

CHECKED S G B

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE: 1 250

No. KG 13-5

E.L. 5/69

MAGNETIC ANOMALY No. 3

Geology, Geochemistry and Magnetic Profile

019

E.L. Boundary North Road

N

PDH INV. 19-1

INVESTIGATOR 19

MAGNETIC ANOMALY 2

8W 7W 6W 5W

4W 3W 2W 1W 0.0

E.L. 20/73

E.L. 5/69

Lagoon

E.L. Boundary North Road

567020

LEGEND:

- Swamp
- Road – E L Boundary
- Road
- Track
- Drain
- Edge of Sand Dunes

- qms Quartz mica schist
- r Mica schist
- s Siliceous chert
- b Basalt
- n Quartz
- g Granite
- a Aplite
- p Pegmatite

5 cm

74-1043

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1 5000

No KI-19-8

INVESTIGATOR 19

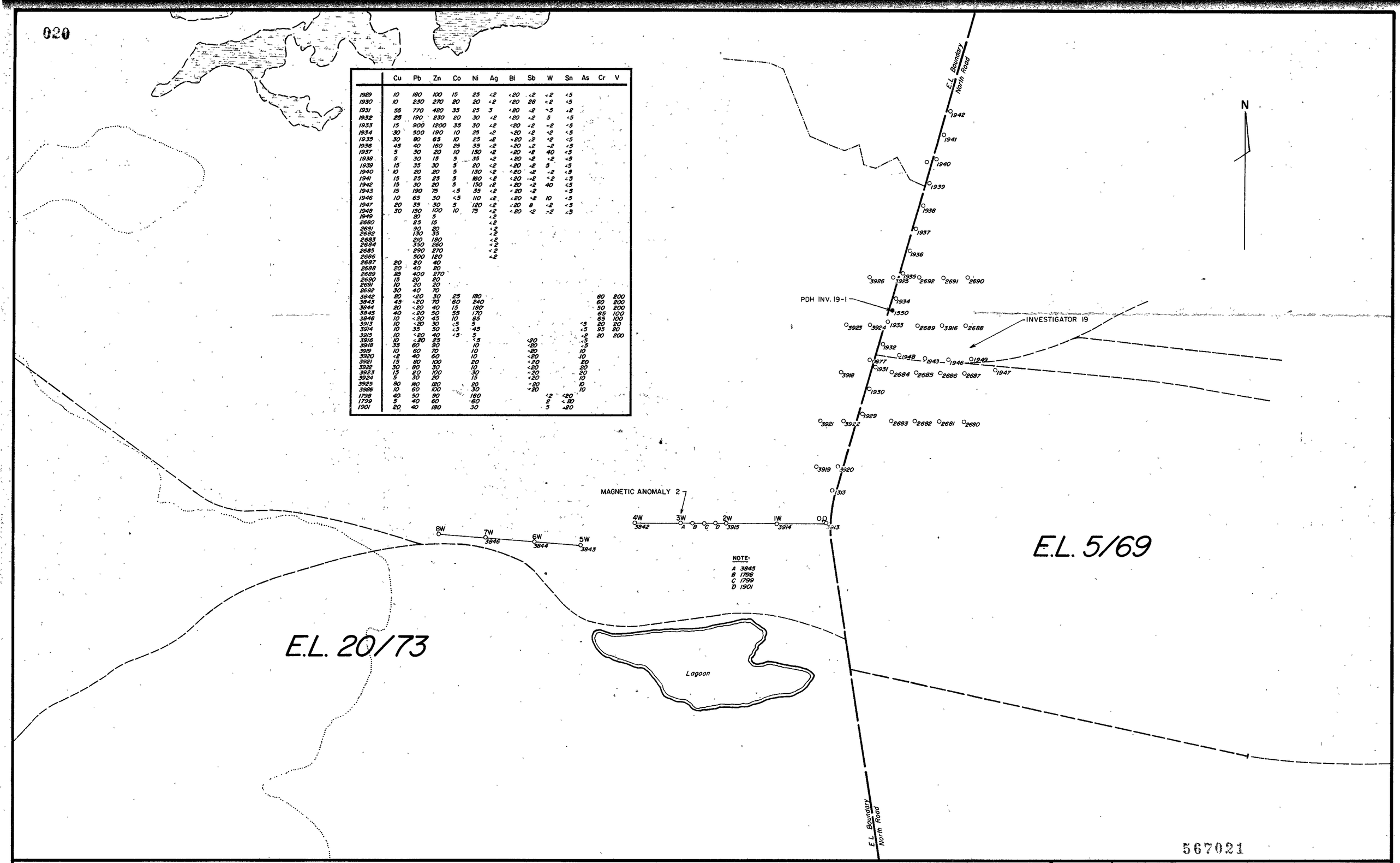
E.L. 5/69 and E.L. 20/73

GEOLOGY

DATE NOV 1973
GEOLOGIST S.G.B.
DRAWN K.D.
CHECKED M.C.R

020

	Cu	Pb	Zn	Co	Ni	Ag	Bi	Sb	W	Sn	As	Cr	V
1929	10	180	100	15	25	<2	<20	<2	<2	<5			
1930	10	230	270	20	20	<2	<20	28	<2	<5			
1931	55	770	420	35	25	3	<20	<2	<5	<2			
1932	25	190	230	20	30	<2	<20	<2	5	<5			
1933	15	900	1200	35	30	<2	<20	<2	<2	<5			
1934	30	500	190	10	25	<2	<20	<2	<2	<5			
1935	30	80	65	10	25	<2	<20	<2	<2	<5			
1936	45	40	160	25	35	<2	<20	<2	<2	<5			
1937	5	30	20	10	130	<2	<20	<2	40	<5			
1938	5	30	15	5	35	<2	<20	<2	<2	<5			
1939	15	35	30	5	20	<2	<20	<2	5	<5			
1940	10	20	20	5	130	<2	<20	<2	<2	<5			
1941	15	25	25	5	160	<2	<20	<2	<2	<5			
1942	15	30	20	5	150	<2	<20	<2	40	<5			
1943	15	190	75	<5	35	<2	<20	<2		<5			
1946	10	65	30	<5	110	<2	<20	<2	10	<5			
1947	20	35	30	5	120	<2	<20	8	<2	<5			
1948	30	150	100	10	75	<2	<20	<2	<2	<5			
1949		20	5			<2							
2680		25	15			<2							
2681		90	20			<2							
2682		130	35			<2							
2683		210	180			<2							
2684		350	260			<2							
2685		290	270			<2							
2686		500	120			<2							
2687	20	20	40										
2688	20	40	20										
2689	35	400	270										
2690	15	20	20										
2691	10	20	20										
2692	30	40	70										
3842	20	<20	30	25	180							60	200
3843	45	<20	70	60	240							60	200
3844	20	<20	40	15	180							50	200
3845	40	<20	50	56	170							65	100
3846	10	<20	45	10	85							65	100
3913	10	<20	30	<5	5						<5	20	20
3914	10	35	50	<5	45						<5	95	20
3915	10	<20	40	<5	5						<5	20	200
3916	10	<20	25		<5		<20				<5		
3918	35	60	90		10		<20				<5		
3919	10	60	70		10		<20				10		
3920	<2	40	60		10		<20				10		
3921	15	80	100		20		<20				20		
3922	30	90	30		10		<20				20		
3923	15	20	100		30		<20				20		
3924	5	30	20		15		<20				10		
3925	80	140	180		50		<20				10		
3926	10	60	100		30		<20				10		
1798	40	50	90		160			<2	<20				
1799	5	40	60		60			2	<20				
1901	20	40	180		30			5	<20				



567021

LEGEND:

- Swamp
- Road – E L Boundary
- Road
- Track
- Drain
- Edge of Sand Dunes

74-1043

5 cm

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1 5000

No. KI-19-9

INVESTIGATOR 19

E.L. 5/69 and E.L. 20/73

TOTAL GEOCHEMISTRY

DATE NOV 1973
GEOLOGIST S.G.B.
DRAWN K.D.
CHECKED M.C.R.

021

E.L. Boundary
North Road

N

PDH INV. 19-1

INVESTIGATOR 19

MAGNETIC ANOMALY 2

E.L. 5/69

E.L. 20/73

Lagoon

E.L. Boundary
North Road

567022

LEGEND:

- Swamp
- Road – E L. Boundary
- Road
- Track
- Drain
- Edge of Sand Dunes

Lead (ppm)

- <20
- 20-40
- 41-80
- 81-120
- 121-160
- >160
- (1200) Repeat Assay

5 cm

74-1043

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1" 5000

No. KI-19-7

INVESTIGATOR 19

E.L. 5/69 and E.L. 20/73

LEAD GEOCHEMISTRY

DATE NOV. 1973
GEOLOGIST S.G.B.
DRAWN K.D.
CHECKED M.C.R.

022

E.L. Boundary
North Road

N

PDH INV 19-1

INVESTIGATOR 19

MAGNETIC ANOMALY 2

E.L. 5/69

E.L. 20/73

Lagoon

E.L. Boundary
North Road

567023

LEGEND

- Swamp
- Road - E L Boundary
- Road
- Track
- Drain
- Edge of Sand Dunes

Zinc (ppm)

- 0-20
- 21-40
- 41-80
- 81-120
- 121-160
- > 160

(1200) Repeat Assay

5 cm

74-1043

GEOPEKO LIMITED
KING ISLAND GROUP

SCALE 1 5000

No. KI-19-6

INVESTIGATOR 19

E.L. 5/69 and E.L. 20/73

ZINC GEOCHEMISTRY

DATE NOV 1973
GEOLOGIST S.G.B
DRAWN K.D
CHECKED M.C.R.

Geological Legend

EAST COAST SANDSTONES - SHALES

REEKARA QUARTZ MUSCOVITE SCHISTS

WEST COAST METASEDIMENTS
(quartzites and quartz mica schists)

DEVONIAN GRANITE

WEST COAST GRANITE COMPLEX

BASALT

BASIC DYKES

Mt. COUNSEL METAMORPHIC AUREOLE

A

B

C

1

2

3

4

INV. 14

Lake Martha Lavinia

Lavinia Point

Phoques Bay

Whistler Point

"L" TRACK

INV 20 ANT

M.A. No. 1

P. MA. 1/1

P. INV. 20/2

P. MA. 4/1

M.A. No. 4

P. INV. 20/1

"M" TRACK

"N" TRACK

Yellow Rock River

M.A. No. 14

E.L. 23/69

Mt. COUNSEL North

WB 2

M.A. No. 3

WB 1

E.L. 5/69

Bungaree Creek

INV. 19 West

M.A. No. 2

INV. 19 East

P. INV. 19/1

M.A. No. 17

'D' Workings

REEKARA TIN AND TUNGSTEN DEPOSITS

'C' Workings

Mt. COUNSEL West

MOUNT COUNSEL GRID

M.A. No. 15

'X' Shaft

DDH 1

DDH 2

E.L. 8/73

39 385

39 405

39 425

39 445

143 30E

144 00E

144 30E

MAGNETIC CONTOUR PLAN
SHOWING LOCATION OF AUGER DRILL HOLES

- Percussion Drill Hole
- Gemco Hole
- Roads
- Boundary E.L.
- Boundaries of areas covered by larger scale maps

FLIGHT ALTITUDE	92 METRES
FLIGHT INTERVAL	TRAVERSE 200 METRES — TIE LINE 4 KILOMETRES
CONTOUR INTERVAL	TOTAL MAGNETIC INTENSITY 5 GAMMAS
CONTOUR INTERVAL	TOTAL COUNT 25 CPS
PROJECTION	INTERGRATED CO-ORD. SYSTEM
SURVEYED AND COMPILED	MARCH - MAY 1973
A.S.C. PROJECT NO.	7302

SHEET INDEX

3
2
1

AIRBORNE GEOPHYSICAL SURVEY
KING ISLAND
TASMANIA
GEOPEKO LIMITED
TOTAL MAGNETIC INTENSITY
REGIONAL FIELD REMOVED
SCALE 1:25,000

0 1 2 3
KILOMETRES

FLOWN AND COMPILED BY AERO SERVICE (AUST.) PTY. LTD.
CAMBERRY, N.S.W.

74-1043

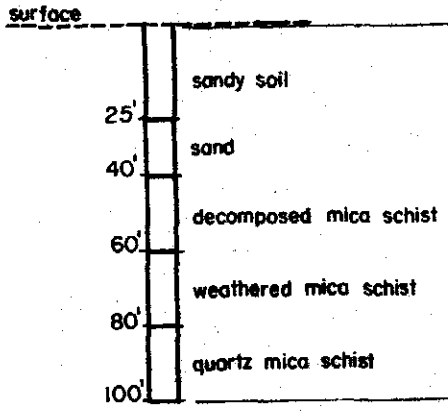
567025

5 cm

4824

Hole No.: Inv. 19-1

567026



Cu	Ni	Zn	Pb	Sn	W
15	10	35	<20	<20	2
10	10	20	20	<20	2
10	10	30	<20	<20	2
15	5	30	25	<20	2
15	10	35	25	<20	2
10	10	105	60	<20	2
20	10	105	60	<20	5
30	15	350	270	<20	2
30	35	540	730	<20	2
30	30	1000	730	<20	5
25	20	1100	1100	<20	5
25	20	1200	1700	<20	10
20	25	1100	1100	<20	2
30	20	640	750	<20	2
50	25	540	850	<20	5
20	30	1100	980	<20	5
20	25	420	680	<20	5
20	30	480	620	<20	5
20	30	370	500	<20	2
25	30	400	490	<20	2

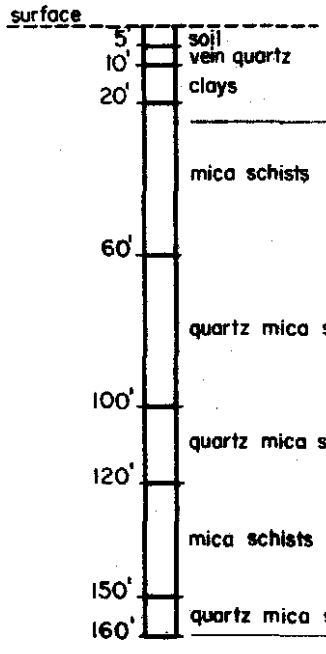
E.L. 5/69
INVESTIGATOR 19-1
Geological Log and Geochemistry

4825

Figure No.

Hole No.: W.B. 2

567027



Cu	Ni	Zn	Pb	Sn	W
30	25	86	20	20	5
35	25	60	25	<20	2
35	25	85	25	30	2
45	25	90	45	<20	5
45	30	110	80	20	2
40	25	85	40	<20	5
50	30	90	35	<20	5
50	85	95	50	30	5
30	30	95	35	<20	2
35	25	90	40	<20	5
40	30	95	35	<20	5
40	60	100	35	<20	5
40	35	95	30	<20	5
40	40	130	30	<20	2
35	40	90	30	<20	5
30	45	85	35	20	2
35	40	90	50	<20	2
30	35	85	30	<20	5
35	40	55	20	<20	2
35	25	80	30	<20	2
35	45	90	30	<20	2
35	30	85	30	<20	2
30	40	95	35	20	2
30	<5	90	35	<20	2
35	30	85	25	<20	2
25	30	75	20	20	2
25	30	80	25	30	2

E.L. 5/69
WATER BORE No. 2
Geological Log and Geochemistry

4826

Figure No.