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GEOPEKO

A DIVISION OF PEKO-WALLSEND OPERATIONS LIMITED

ELLIOTT BAY AREA - TASMANIA

PROGRESS REPORT: EXPLORATION LICENCE 27/76

VOYAGER 10 PROSPECT

by

C.D. STRICKLAND

DEVONPORT, TASMANIA JUNE, 1980

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SUMMARY

Exploration Licence 27/76 is currently held by Geopeko, a Division of Peko-Wallsend Operations Limited and occupies a total area of 329 square kilometres.

This report details the nature and results of the Voyager 10 prospect evaluation programme carried out during the summers of 1978-79 and 1979-80. The programme was designed to examine an area of approximately 1 square kilometre that had shown anomalous stream sediment geochemistry during the 1977-78 regional evaluation. The area was gridded at 200m x 50m centres, then detailed geological mapping, C-horizon soil sampling and ground geophysics carried out.

The report discusses the conclusions and recommendations are made regarding the future of the Voyager 10 prospect.

INTRODUCTION

Exploration Licence 27/76 is currently held by Geopeko and occupies an area of 329 square kilometres in the land district of Montgomery, south west Tasmania (See Fig 1).

Reconnaissance geological mapping and stream sediment geochemistry was first carried out in the Voyager 10 (See Fig 2) environs during the 1977-78 field season and is fully reported in STRICKLAND C.D. 1978.

This report reviews the detailed geological, geochemical and geophysical programmes carried out during both the 1978-79 and 1979-80 seasons. The results of the exploration activities are discussed and forward recommendations presented.

The 1978-79 exploration programme consisted of:

a) Gridding: 1000 metres of theodolite gridding and 6000 metres of range pole gridding.

b) Geological mapping at 1:2500 scale.

c) C-horizon auger sampling at 200m x 25m centres, a total of 247 holes.

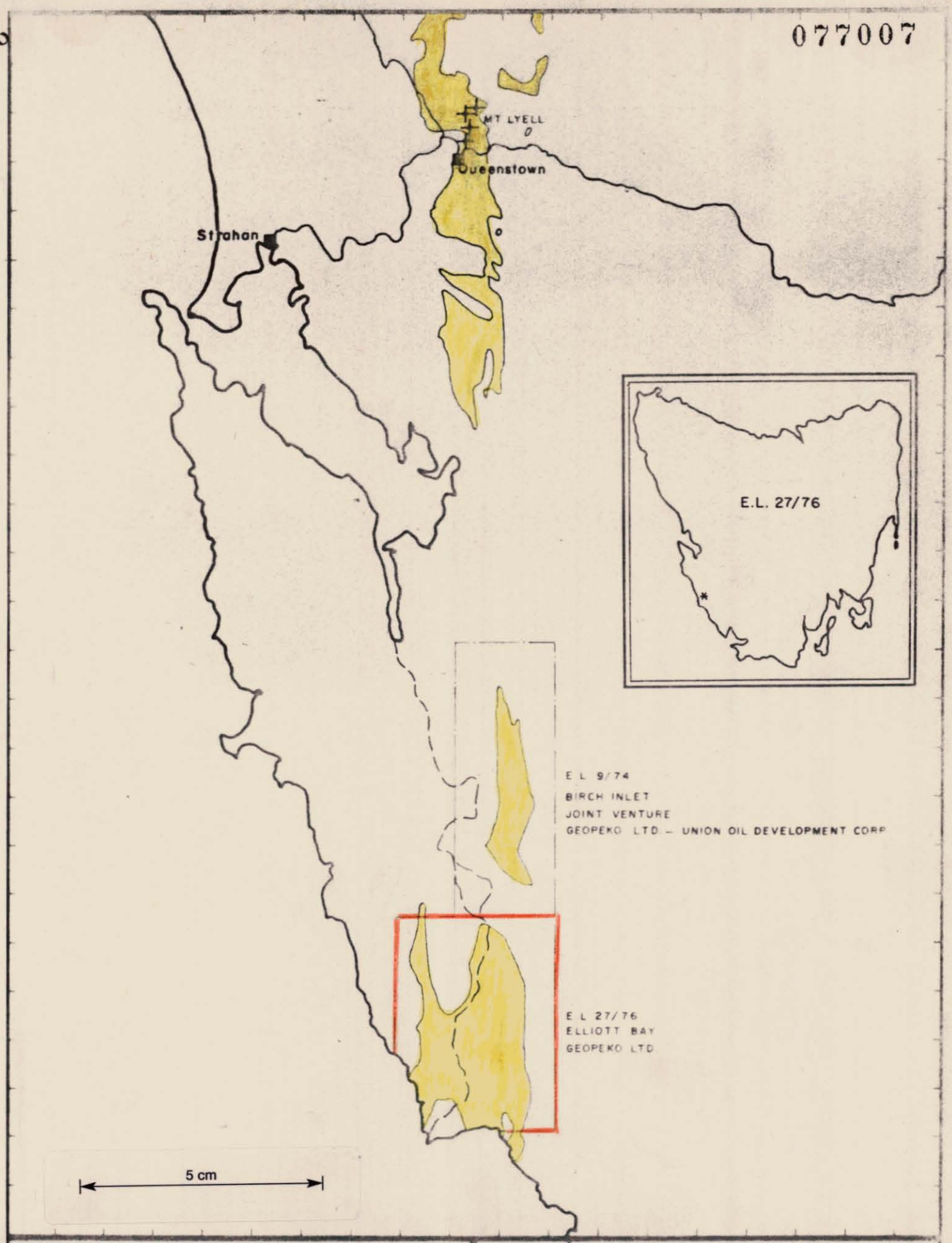
d) Geophysical surveys utilizing Dipole-Dipole I.P. and S.P.

The 1979-80 exploration programme consisted of:

a) Gridding: 1000 metres of range pole gridding.

b) Geophysics; 4,600 metres of ground magnetics.

c) Reporting:



LEGEND

- Significant Basemetal Mineralization
- Mt Read Acid Volcanics
- Road
- Track

DATE 18-4-78
DRN C D S
DWN J P M
CHKD CDS

GEOPEKO LIMITED
KING ISLAND

Scale 1 500 000 | Fig No. 1

LOCATION MAP

E.L. 27/76

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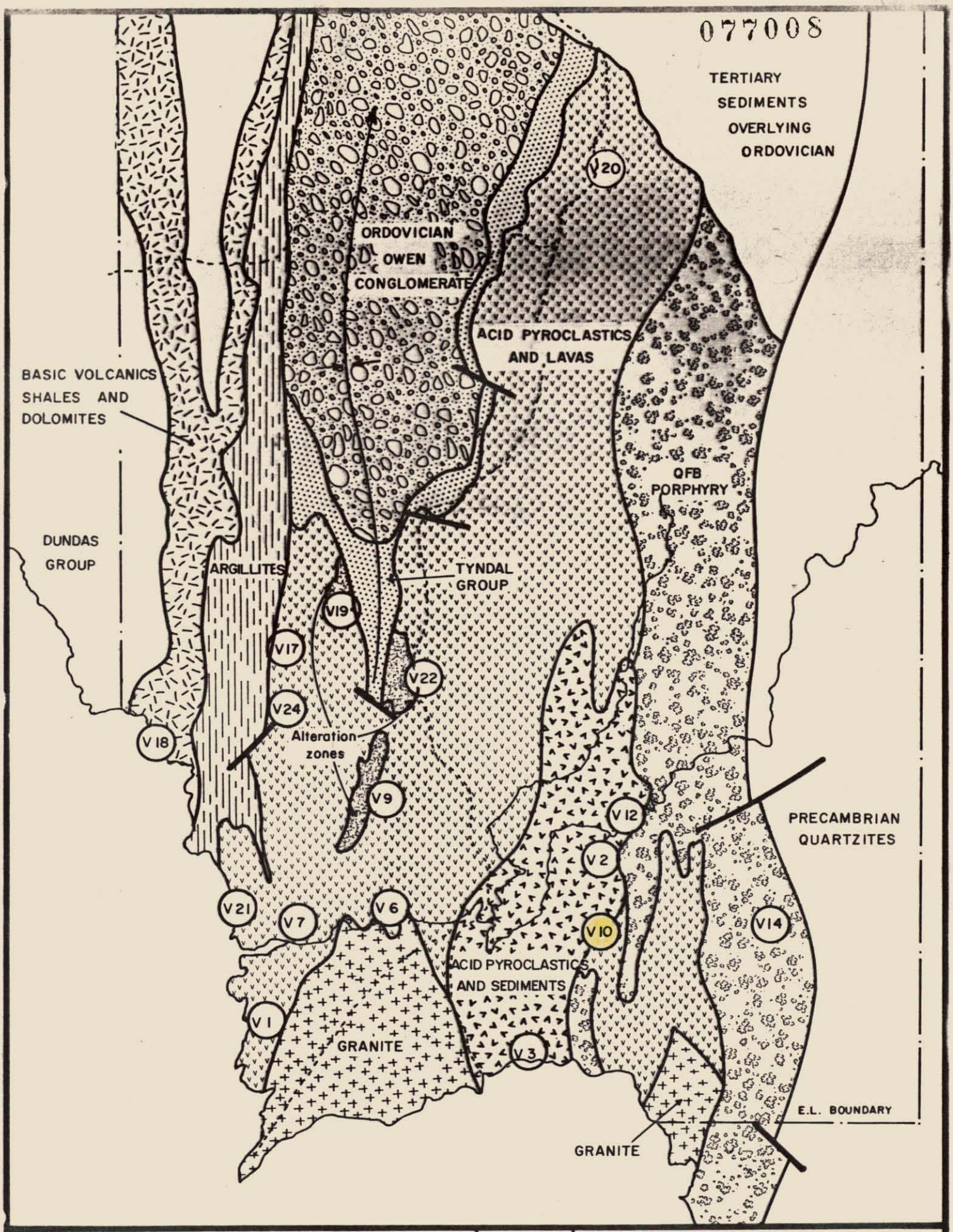
077008



LEGEND

(V10) Location of Voyager 10 prospect.

5 cm

DATE:
GEOL:
DWN:
CHKD:

GEOPEKO

SCALE: 1:100 000

Fig. 2

ELLIOTT BAY
E.L. 27/76

PROSPECT LOCATION MAP

CONCLUSIONS

1. Lack of outcrop in the vicinity of the Voyager 10 prospect has prevented any satisfactory geological interpretation of the area. Photo-geological evidence suggests the presence of a coarse grained quartz feldspar biotite porphyry, part of the Voyager 12 porphyry, however no ground evidence of this lithology has yet been detected.

2. Geological investigations have conclusively shown that the Voyager 10 prospect is not a southern extension of the Voyager 2 prospect. The Voyager 2 volcaniclastic siltstones, shales, greywackes and tuffs are not evident at Voyager 10.

3. Significant C-horizon Cu, Pb and Zn anomalies have been shown to occur on the grid, however due to a large number of hand auger holes, necessitated by the vegetation cover, it is not valid to contour the data. North-south geochemical trends predominate. The background values from hand auger holes are considerably lower than those from the deeper power auger holes.

4. The results of a ground water conductivity survey coincide closely with one major C-horizon Cu, Pb and Zn anomaly and suggests the continued experimentation with this rapid survey technique.

5. No significant I.P., S.P. or magnetic anomalies were detected on the Voyager 10 grid. A broad zone of I.P. interest is suggested immediately west of the grid.

6. The reconnaissance stream sediment survey anomalies are explained by the C-horizon geochemistry however the latter are yet to be adequately understood.

RECOMMENDATIONS

1. No additional investigations be carried out on the Voyager 10 grid at this stage.

2. During the regional grid evaluation of the volcaniclastic horizon extending from Voyager 3 to Voyager 2 (See: Strickland C.D. 1980, "Progress Report Voyager 3". - Recommendations) the zone immediately west of Voyager 10 between 8400N - 9000N should be evaluated by Dipole-Dipole I.P. to investigate the "polarizable source" suggested by Mudge, S.T.

3. Conductivity surveys, utilizing the ground water present in auger-holes or possibly using an "artificial" ground water produced from dissolving part of a soil sample in distilled water, are producing trends and anomalies coincident with base metal soil surveys. Experimentation in the use and usefullness of this rapid technique should continue.

ACTION SHEET

GRIDDING

For convenience and accuracy the Voyager 10 grid was 'tied in' to the existing Voyager 2 grid. A short southern extension of the Voyager 2 baseline (10 000E) enabled the positioning of the most northerly Voyager 10 cross line (9 000N). The Voyager 10 baseline was established in the most favourable terrain on the western side of the prospect at 10 350E. Cross lines were range pole surveyed at 200 metre intervals betwen 8 200N and 9 000N from 10 100E to 11 300 E.

During the 1979-80 field season lines 8 200N and 8 400N were each extended an additional 500 metres further east (from 11 300E-11 800E) for the purpose of conducting a ground magnetic survey.

Slow gridding progress was recorded in the heavily timbered central portion of the prospect.

GEOLOGY

The Voyager 10 prospect is situated immediately south east of the Voyager 2 Grid and is thus approximately 2.0 kilometres south of the Lewis River. The topography is gently undulating with 60% of the prospect covered with low scrub and button grass and 40% by dense rain forest. This combination of low relief and vegetation results in less than 5% outcrop over the whole prospect, thus an interpretation of the geological mapping (Sheet TS 27/76 . V10-2) has not been carried out. Sheet TS 27/76 V10-8 presents the auger hole rock chip geology.

Reconnaissance exploration covering the Voyager 10 prospect is reported on in Strickland C.D. 1978. The recommendations for additional exploration activity in this area were based upon the area's low but significant stream sediment Cu, Pb and Zn anomalies. Of major importance was the close proximity of the Voyager 2 environment and it was thought that possibly the Voyager 2 sediments and tuffs extended south eastwards to Voyager 10.

The 1978-79 exploration programme in the Voyager 10 area has shown that the environment is not composed of a volcanosedimentary sequence of siltstones, greywackes and tuffs as is the Voyager 2 prospect.

The geological mapping of the rare outcrops and float samples on the Voyager 10 grid has show that the area contains a variety of rhyolitic pyroclastics comprising vitric, crystal and lithic tuff types.

It is considered unjustified, due to the limited outcrops present on the geological map, to attempt an interpretation of the existing geological structure. The map (Sheet TS 27/76 V10-2) displays only the location and geological description of the mapped outcrops.

Photo interpretation suggest a tongue of qfb porphyry extending south into the Voyager 10 area from the Voyager 12 prospect, but to date no outcrops of this lithology have been identified.

GEOCHEMISTRY

C-horizon soil sampling was carried out on all traverses at 25 metre centres, a sample spacing of 200m x 25m. Auger drilling, in the accessable areas, was completed using a Jacro 200 auger rig mounted on the rear of a J5 Bombardier. In the timbered central portions of the Voyager 10 grid the auger sampling could only be carried out by hand auger techniques. The differing drilling methods and thus the marked different depths from which the resulting samples originated show as major trends in the Cu, Pb and Zn geochemistry results.

All soil samples were dried and rebagged (as necessary) prior to despatch to A.C.S. Laboratories, Adelaide. The -80 mesh fraction was separated and analysed for Cu, Pb and Zn only. This limited spectrum was chosen to enable rapid analysis and communciation of results back to the field programme.

The sample book numbers (KS series), method of preparation and analysis and assay results are enclosed as appendix 1.

Sheets TS 27/76 V10-3 to TS 27/76 V10-5 in the folder of this report present the Cu, Pb and Zn results obtained from the C-horizon soil sampling.

Sheet TS 27/76 V10-7 displays the type of auger hole, hole location, soil sample number and auger hold depth.

A Beckman Model MG conductivity meter was used to test quantities of water from the C-horizon auger holes. Unfortunately a large percentage of the power auger holes were dry and it was equally impossible to test the hand augered holes. The contoured results are presented as Sheet TS 27/76 V10-9, however the results are somewhat interpretative due to the many data gaps. A strong conductivity anomaly appears in the northeast portion of the grid centred on 8800N, 10825E. A peak value of 0.80 millimohs/cm occurs at this location.

Due to an instrument malfunction the southeastern section of the grid remains unsurveyed.

GEOPHYSICS

A detailed report on the geophysical surveys carried out during the 1978-79 season at Voyager 10 is presented by Mudge, S.T., 1979.

Field investigations involved Dipole-Dipole I.P. and S.P. techniques.

1) Dipole-Dipole I.P. was conducted on lines 8 200N to 9 000N inclusive to test for any sulphide mineralization occuring along strike from Voyager 2 and also to test the area of A.E.M. 16.
A resistivity low occurs on line 9 600N between 10 775E - 10 925E and is considered to represent a change in rock type rather than sulphide mineralization.
The increase in chargeability west of 10 100E on lines 8 400N - 9 000N inclusive may represent a polarizable source inadequately investigated west of the grid.

2) A single traverse S.P. survey was conducted on line 8 600N between 10 600E - 11 125E to test the I.P. metal-factor/resistivity anomaly detected in (1) above. No anomaly was indicated by this technique.

Additional ground geophysics were programmed during the 1979-80 summer season, 4 600 metres of ground magnetics were completed in order to locate a magnetic feature in the south eastern portion of the Voyager 10 grid.

On line 8 600N between 10 900E - 11 000E a sharp 450 gamma anomaly occurs incorporating a major reversed polarity feature, this anomaly is not present on line 8 400N.

A broad, less than 100 gamma anomaly feature occurs between 11 300E - 11 700E on lines 8 200N and 8 400N. The anomaly appears to be related to a lithological change rather than representing a potential discrete source.

DISCUSSION OF RESULTS

The geochemical evaluation of the prospect has been hindered by the marked contrast in the analytical values from the power auger holes and from the hand auger holes. This marked contrast has prevented the survey results from being contoured. Fortunately the northern and western sections of the prospect were able to be power augered and show two major centres of Cu, Pb and Zn concentration. At approximately 8800N, 10800E peak values for Cu, Pb and Zn are 460, 1600 and 740ppm respectively. This anomaly centre coincides very closely (i.e. within 25 metres) with the major conductivity anomaly-giving added value to the usefulness of ground water conductivity surveys. At approximately 8600N, 10450E the second geochemistry anomaly occurs with peak values for Cu, Pb and Zn being 640, 3900 and 1900ppm respectively. This anomaly trends north south and for Pb extends from 8800N southwards to 8200N. This anomalous area is not represented by a coincident conductivity anomaly, however numerous dry holes in this locality may be responsible for the lack of an anomaly.

Geochemistry trends appear to be north south which suggests that the anomalous horizons are not compatable with the Voyager 2 horizons. This fact is confirmed by the geological mapping which has not defined any major volcanosedimentary lithologies as present at Voyager 2.

Recent photo geological investigations by Dr. Large R.R. (pers comm) have shown a great fold complexity within portions of E.L. 27/76. Until more details are known of the local stratigraphy within the Voyager 10 area it is not possible to relate the geochemical patterns with structure.

Dipole-Dipole I.P. suggests that west of 10100E on lines 8400N - 9000N inclusive there may be an inadequately investigated polarizable source.

The resistivity low encountered on 9600N in the centre of the grid is considered to represent a change in rock type, and no anomaly was encountered when tested with S.P.

Magnetics failed to define any significant descrete source magnetic features in the south eastern sector of the grid.

BIBLIOGRAPHY

Mudge, S.T. 1979 — Induced Polarization Survey. Voyager 10 ELLIOTT BAY, TASMANIA. Unpublished report by L.A. Richardson and Associates for Geopeko.

Strickland, C.D. 1978 — Progress Report, Exploration Licence 27/76, 1976-77 and 1977-78 Field Seasons. ELLIOTT BAY, TASMANIA. Unpublished Geopeko report.

GEOPEKO

C.D. STRICKLAND
Senior Geologist.

ANALYTICAL RESULTS

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1462	95	280	80			
3	5	30	20			
4	40	80	55			
5	60	40	10			
6	70	50	20			
7	100	40	20			
8	50	120	35			
9	220	20	45			
70	10	40	30			
1*	5	40	25			
2	220	40	35			
3	85	60	65			
4	320	120	260			
5	55	100	35			
6	10	40	15			
7	360	230	40			
8	5	30	15			
8**	5	30	15			
9	(2	40	10			
80	20	45	75			
1*	20	50	85			
2	650	100	200			
3	15	130	1200			
4	25	40	45			
5	95	60	100			
6	40	540	500			
7	10	120	290			
8	15	100	100			
9	10	240	550			
90	10	140	160			
1*	5	140	160			
2	5	50	45			
3	10	30	80			
4	10	50	80			
5	(2	80	35			
6	(2	90	170			
7	5	40	40			
8	40	270	190			
9	25	130	210			
500	140	750	280			
1*	160	820	340			
2	80	840	800			
3	(2	40	60			
4	5	40	45			
5	(2	60	150			
6	10	90	220			
KS 1507	10	130	105			

* Denotes duplicate of previous sample.

** Denotes repeat and check.

(Denotes less than.

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1508	10	50	100			
9	5	80	50			
10	(2	100	100			
1*	5	150	130			
2	5	40	90			
2**	5	40	90			
3	15	580	270			
4	10	110	70			
5	35	810	1140			
6	10	120	150			
7	30	480	600			
8	460	1600	1740			
9	10	90	140			
20	15	120	150			
1*	30	60	135			
2	10	50	140			
3	10	20	35			
4	10	40	75			
5	10	50	65			
6	10	40	70			
7	5	60	45			
8	(2	40	55			
9	50	260	350			
30	10	120	180			
1*	10	110	140			
2	5	60	140			
3	85	250	480			
4	(2	140	30			
5	5	320	600			
5**	5	320	600			
6	60	130	235			
7	5	60	340			
8	(2	30	95			
9	5	20	90			
40	5	40	150			
1*	(2	20	170			
2	5	40	110			
3	(2	40	20			
4	30	120	200			
5	30	150	760			
6	230	40	20			
7	10	40	35			
8	250	400	190			
9	(2	20	10			
50	50	60	170			
1*	45	20	160			
2	150	130	170			
3	10	60	95			
4	10	20	40			
5	(2	20	50			
5**	(2	30	60			
6	10	20	190			
KS 1557	5	40	135			

* Denotes duplicate of previous sample

** Denotes repeat and check.

(Denotes less than.

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1558	(2	40	30			
9	60	80	170			
60	(2	40	150			
1*	(2	30	215			
2	5	40	60			
3	(2	160	710			
4	30	130	110			
5	15	130	90			
6	640	3900	1900			
7	20	240	95			
8	15	390	160			
9	(2	40	10			
70	5	70	45			
1*	10	40	60			
2	15	530	290			
3	5	(20	20			
4	5	80	40			
5	10	40	35			
6	(2	60	30			
7	10	40	25			
8	10	100	30			
9	10	50	65			
9**	10	50	65			
80	5	60	40			
1*	(2	60	40			
2	(2	60	5			
3	(2	40	(2			
4	(2	50	20			
5	35	120	60			
6	40	140	190			
7	10	240	95			
8	(2	20	15			
9	(2	30	(2			
90	5	90	50			
1*	5	100	45			
2	20	40	60			
3	10	60	20			
4	(2	480	360			
5	40	120	370			
6	15	180	190			
7	(2	580	75			
8	15	120	100			
9	(2	40	20			
9**	5	40	25			
600	10	40	165			
1*	5	20	145			
2	(2	50	100			
3	5	40	170			
4	(2	40	190			
5	(2	50	200			
6	5	80	215			
7	(2	60	30			
KS 1608	5	80	40			

* Denotes duplicate of previous sample

** Denotes repeat and check.

(Denotes less than.

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1609	5	40	30			
10	(2	50	35			
1	(2	40	35			
2*	(2	80	40			
3	(2	20	25			
4	(2	20	90			
5	(2	20	10			
6	(2	20	40			
7	10	120	90			
8	5	60	25			
9	(2	400	140			
20	5	320	1260			
1*	5	160	1380			
2	5	320	1040			
3	5	40	20			
4	10	80	30			
4**	10	80	30			
5	5	70	25			
6	10	20	20			
7	10	60	25			
8	5	40	10			
9	(2	40	10			
30	(2	40	15			
1*	5	20	10			
2	(2	20	15			
3	5	60	40			
4	5	60	10			
5	(2	50	30			
6	(2	50	15			
7	(2	70	30			
8	(2	30	10			
9	20	80	180			
40	(2	(20	15			
1*	(2	30	15			
2	(2	(20	10			
3	(2	40	25			
4	5	60	20			
5	(2	20	20			
6	(2	20	10			
7	10	40	10			
8	5	40	20			
9	(2	30	10			
50	(2	20	15			
50**	(2	20	15			
1*	5	20	15			
2	(2	20	10			
3	(2	50	10			
4	5	40	15			
5	5	50	10			
6	(2	20	10			
7	(2	30	10			
8	5	60	35			
KS 1659	5	90	60			

* Denotes duplicate of previous sample

** Denotes repeat and check.

(Denotes less than.

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1660	(2	20	20			
1*	(2	30	20			
2	(2	40	10			
3	(2	(20	(2			
4	(2	20	10			
5	(2	(20	10			
6	(2	(20	10			
7	5	40	15			
7**	5	40	15			
8	(2	30	15			
9	(2	20	10			
70	5	20	5			
1*	5	(20	10			
2	5	20	10			
3	5	30	10			
4	(2	20	15			
5	5	50	10			
6	10	60	280			
7	(2	70	15			
8	(2	30	5			
9	5	80	60			
80	5	20	10			
1*	(2	(20	10			
2	(2	20	25			
3	5	60	10			
4	(2	20	10			
5	(2	30	20			
6	95	120	105			
7	20	120	150			
8	(2	70	235			
9	40	410	210			
90	50	200	90			
1*	70	330	130			
2	65	240	680			
3	5	50	100			
4	15	720	270			
5	120	160	75			
6	(2	40	10			
7	5	50	10			
7**	5	40	10			
8	35	160	60			
9	5	90	155			
1700	30	440	110			
1	15	150	590			
2*	15	160	550			
3	(2	40	30			
4	10	60	20			
5	10	60	60			
6	5	30	35			
7	(2	120	30			
8	10	60	20			
9	5	80	10			
KS 1710	5	(20	15			

* Denotes duplicate of previous sample

** Denotes repeat and check.

(Denotes less than.

SAMPLE NUMBER	Cu ppm	Pb ppm	Zn ppm			
KS 1711*	(2	40	10			
2	(2	20	15			
3	(2	40	20			
4	5	40	10			
4**	(2	40	10			
5	(2	30	10			
6	10	30	20			
7	(2	20	10			
8	5	20	25			
9	5	40	15			
20	5	20	10			
1*	5	20	20			
2	10	20	30			
3	(2	20	15			
4	(2	40	10			
5	(2	20	10			
6	5	50	15			
7	5	40	30			
8	(2	60	25			
9	5	30	20			
30	10	50	20			
1*	10	30	15			
2	10	30	20			
3	10	20	25			
4	5	60	70			
KS 1735	5	40	70			

* Denotes duplicate of previous sample

** Denotes repeat and check.

(Denotes less than.

028

Appendix No.2.

077029

OPERATION OF LEGEND

1 Capital letter — indicates primary classification eg S = sedimentary rock, A = acid rock, M = basic rock

2 Lower case letters — indicate the following

(i) Colours - e.g. pk/grnA = pink fragments in an acid igneous rock with a green matrix

(ii) Textural or structural features - e.g. xtA = crystal tuff of acid composition, eg pA = porphyritic acid rock, e.g. oxA = oxidised acid rock.

b. As suffixes in progressive order:

(i) Categorised - e.g. pAr = rhyolite, e.g. Ia = intermediate rock cf andesitic composition

(ii) Mineralogy - e.g. pArf = porphyritic (rhyolite) with feldspar phenocrysts, e.g. lxt f/b = lithic crystal tuff with feldspar (phenocrysts component) and biotite (prominent matrix component), e.g. lxt fq = lithic crystal tuff with (major) feldspar crystals and (minor) quartz crystals, e.g. fb mg pArqfs (black specks) = flow banded porphyritic rhyolite with quartz (major phenocryst component, size range 1mm - 5mm), feldspar (minor phenocryst component), sericite (prominent matrix component), and black specks (minor undifferentiated accessory mineral)

SYMBOLS

IGNEOUS

A	acid igneous unclassified
Ar	rhyolite
I	intermediate igneous unclassified
Ia	andesite
Id	dacite
M	basic igneous unclassified
Mv	basalt
Md	dolerite
Gr	granite

SEDIMENTARY

Sah	shale
Saltst	siltstone
Sst	sandstone
Sqtz	quartzite
Scongl	conglomerate
Sv	volcaniclastic sediment

STRUCTURAL and TEXTURAL

t	tuff unclassified
lt	lithic tuff
xt	crystal tuff
vt	vitric tuff
fb	flow banding
p	porphyritic
clvd	cleaved
shd	sheared
ox	oxidized
vns	veins
lam	laminated
brec	brecciated
sch	schistose

STRUCTURAL

	outcrop limit
	rubble boundary
	interpretative contact
	bedding
	joint
	cleavage
	primary foliation
	fault
	unconformity

SILICATE MINERALOGY

q	quartz
f	feldspar
mus	muscovite
b	biotite
c	chlorite
s	sericite
cb	carbonate
matics	matics
hb	hornblende
sid	silicified
ferromag	ferromagnesians

SULPHIDE MINERALOGY

s	sulphides
py	pyrite
cpy	chalcopyrite
gn	galena
hm	hematite
mag	magnetite
gos	gossan
lim	limonite

COLOURS

pk	pink
grn	green
brn	brown
ple	pale
dk	dark
wte	white
gry	grey
pur	purple

GRAIN SIZE

fg	fine grained (<1mm)
mg	medium grained (1mm - 5mm)
cg	coarse grained (5mm - 5cm)

MISCELLANEOUS

TS 3033	Thin section and rock No
* 1112	Geochemical analysis and rock No
	Grid traverse
	Anomaly centre (approximate)
	Old workings
	Campsite

GEOLOGICAL INTERPRETATION

Pencil No		
19-1	TERT	(Macquarie Beds)
19-6	L ORDO	Conglomerate (Owen type), sandstones (Scongl, Sst)
19-50	Ia	Andesite
19-67	M	Basic dyke
19-10	UC ?	Granite (Gr)
19-13	C	Sandstone (Sst)
19-17	C	Fine grained volcaniclastic sediments (fg Sv(sst), Sv(Sah),)
19-18	C	Coarse grained sedimentary breccia (cg S(brec))
19-19	C	Porphyritic quartz - feldspar rhyolitic lava (fbpArqf)
19-21	C	Feldspar - quartz - biotite porphyry (cg pArfqb)
19-24	C	**Rhyolitic vitric pyroclastics** Vitric tuff, vitric crystal tuff (vtq, vxtq)
		Rhyolitic crystal pyroclastics Crystal tuff, crystal lithic tuff (xtq, xltqf)
19-32	C	Rhyolitic lithic pyroclastics Lithic tuff, lithic crystal tuff, lithic vitric tuff, (cglltqf, mglxtqf, lvtqf)
19-70	PRE C	Undifferentiated quartzite, quartz mica schist (Sqtz, fglmsch Sshmus)


9800 E
10000 E
10200 E
10400 E
10600 E
365 000 mE AMG
10800 E
11000 E
11200 E
11400 E
11600 E
9200 N
9200 N Voyager 2 Grid
9000 N
8800 N
8600 N
5 244 000 m N AMG
8400 N
8200 N
8000 N
10 350 E
ple grn fg-mg pArfqs
grn vx?tsid
dk grn vx?tcsid
grn vxl?tq
dk grn vlx?tsid
wte/ple grn ox lx?tq
ple grn/wte shd lxts
ple fg pArqf
grn vxtqf
grn vx?tsid
ple grn xvt sid (vxt sid)?
ple grn xtfqs
grn/wte lx?tqf
ple grn clvd lx?tqfs
grn vx?tsid
ple grn vlt
brn/grn lvtfq
dk grn lx?t
ple grn vxltq sid
ple xltq
wte/ple grn fg pArqf sid
dk grn fg pArqfs
ple grn shd xltqc
wte/ple grn lxtqfs
ple grn lx?t
ple vx?t sid
ple grn/dk grn xltqfs
wte/pk fb ? fg-mg pArqf
ple vltq sid
wte/dk grn shd vtqc
ple vxltq
ple grn shd vxltq
ple vxt sid
wte/ple grn fg pArqfs
65
75
0.15
0.10
0.35
0.16
0.11

LEGEND

For details of the abbreviations used for the geological interpretations see appendix no. 2

●...... Power auger hole
○...... Hand auger hole
.......Grid position

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

No. TS 27/76-V10-2

E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER 10
GEOLOGICAL MAP

DATE JUNE 1980
C.D.S.
J.P.M.

001
077030

80-1446

LEGEND

o<2 <2 / 5
- <2 ppm Cu original sample.
- <2 ppm Cu repeat and check original sample.
- 5 ppm Cu duplicate sample.

ANALYTICAL METHOD

Cu by AAS.

A.C.S. Laboratories. ADELAIDE.

- • ....Power auger hole
- o ....Hand auger hole
- ....Grid position

5 cm

NOV '79	GEOPEKO A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
C.D.S.	1:2500 — TS 27/76-VIO-3
J.P.M.	E.L.27/76 ELLIOTT BAY, TASMANIA VOYAGER 10
C96.	C- HORIZON GEOCHEMICAL RESULTS COPPER 002 077031

80-1446.

9 200 N

9200 N Voyager 2 Grid

9 000 N

8 800 N

5 244 000 m N
AMG

8 600 N

8 400 N

8 200 N

8 000 N

9800 E | 10 000 E | 10 200 E | 10 400 E | 10 600 E | 385 000 mE AMG | 10 800 E | 11 000 E | 11 200 E | 11 400 E | 11 600 E

10 350 E

LEGEND

o 20 20 — 20 ppm Pb original sample
20 ppm Pb repeat and check original sample.
20 ppm Pb duplicate sample.

ANALYTICAL METHOD
Pb by AAS

A.C.S. Laboratories. ADELAIDE.

•.....Power auger hole.
o.....Hand auger hole
.....Grid position

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

No TS 27/76-VIO-4

E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER IO
003
C - HORIZON GEOCHEMICAL RESULTS
LEAD 077032

DATE NOV '79
DRAWN C.D.S.
PLAN J. P. M.
CHK C.S.

80-1446

LEGEND

15 ppm Zn original sample.
15 ppm Zn repeat and check original sample.
15 ppm Zn duplicate sample.

ANALYTICAL METHODS

Zn by AAS.

A.C.S. Laboratories, ADELAIDE.

● Power auger hole
o Hand auger hole
· Grid position

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

TS 27/76-VI0-5

E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER 10
C-HORIZON GEOCHEMICAL RESULTS
ZINC

004
077033

NOV. '79
C.D.S.
J.P.M.
C.D.S.

80-1446

LEGEND:
Auger hole depth — 2·0 o 1620
Original soil sample no. KS 1620
Duplicate soil sample no. KS 1621
1621
Power auger hole
Hand auger hole
Grid position
5 cm
GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.
TS 27/76-V10-7
E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER 10
003
SOIL SAMPLE LOCATION / AUGER HOLE DEPTHS
077034
NOV '79
C.D.S.
J.P.M.
9800E
10000E
10200E
10400E
10600E
10800E
11000E
11200E
11400E
11600E
9200 N
9000 N
8800 N
8600 N
8400N
8200N
8000N
5 244 000m N
AMG

9800 E | 10000 E | 10200 E | 10400 E | 10600 E | 385 000 mE AMG | 10800 E | 11000 E | 11200 E | 11400 E | 11600 E

9200 N Voyager 2 Grid

10 350 E

9 200 N | 9 000 N | 8 800 N | 8 600 N | 8 400 N | 8 200 N | 8 000 N

5 244 000 m N AMG

5 244 000m N AMG

LEGEND:

For details of the abbreviations used for the geological interpretations refer to appendix no.2

●.....Power auger hole

o.....Hand auger hole

.....Grid position

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500

No. TS27/76-V10-8

E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER 10

006

AUGER HOLE ROCK CHIP GEOLOGY
077035

DATE: MAY 1980
C.D.S.
J.P.M.
CHECKED

80-1446

9800 E | 10000 E | 10200 E | 10400 E | 10600 E | 385 000 mE AMG | 10800 E | 11000 E | 11200 E | 11400 E | 11600 E

9200 N — 9200 N Voyager 2 Grid

10 350 E

9000 N | 8800 N | 8600 N | 8400 N | 8200 N | 8000 N

5 244 000 m N AMG

9200 N | 9000 N | 8800 N | 8600 N | 8400 N | 8200 N | 8000 N

5 244 000m N AMG

9800 E | 10000 E | 10200 E | 10400 E | 10600 E | 385 000 mE AMG | 10800 E | 11000 E | 11200 E | 11400 E | 11600 E

077036

LEGEND:

Conductivity Survey

1. Beckman model M.6 conductivity meter.
2. Ground water sample, obtained from C-Horizon auger holes.

—— Survey incomplete (Instrument malfunction).

Contour Interval

Pencil No. 19-6 ▭ 0·25 — 0·50 millimohs/cm
19-10 ▭ > 0·50 millimohs/cm

Auger Hole Condition

* insufficient ground water

● Power auger hole
o Hand auger hole
Grid position

5 cm

GEOPEKO
A DIVISION OF PEKO-WALLSEND OPERATIONS LTD.

SCALE 1:2500 — No. TS 27/76 V10-9

E.L.27/76 ELLIOTT BAY, TASMANIA
VOYAGER 10
GROUND WATER CONDUCTIVITY RESULTS
MILLIMOHS / CM CONTOURS 007

DATE: JUNE '80
GEOLOGIST: C D S
DRAWN: J P M
CHECKED:

80-1646