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ANGLO AUSTRALIAN RESOURCES N.L.
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THIRKELL HILL
 EL3/92

ANNUAL REPORT
 1997

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 EL 3/92
 18 AUG 1997

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AMG REFERENCE POINTS ADDED

Russell Fulton
August, 1997

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ANNUAL REPORT - EL 3/92
 THIRKELL HILL - ANGLO AUST RES.
 R FULTON

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1.0 SUMMARY

EL 3/92 - Thirkell Hill is located in western Tasmania, approximately 50 kilometres south of Queenstown. The tenement is underlain by the Mt. Read Volcanics, which to the north, host major mineral deposits at Mt. Lyell (100 Mt at 1.3% Cu and 0.4 g/t Au), Rosebery (20 Mt at 16% Zn, 5% Pb, 0.74% Cu, 155 g/t Ag and 2.9 g/t Au), Hellyer (17 Mt at 13% Zn, 6.8% Pb, 0.3% Cu, 160 g/t Ag and 2.3 g/t Au) and Henty (500,000 t at 30 g/t Au). Significant base metal and gold mineralisation has been located in the Mt. Read Volcanic Belt to the south of Thirkell Hill at Elliot Bay. Thirkell Hill exploration targets are polymetallic, volcanic hosted massive sulphide (Rosebery/Hellyer type), disseminated copper-gold (Mt. Lyell type) and structurally controlled, high-grade gold (Henty type).

Exploration conducted before Anglo Australian Resources had focused almost entirely on the base metal potential of the volcanics. Exploration had been of a regional reconnaissance nature using airborne E.M./magnetics, broadly spaced gradient-array I.P., soil (base metal assaying only) traverses, stream sediment sampling (almost entirely base metals only) and geological mapping. Anomalies defined by this work were followed up by hand held E.M. (max-min) and ground magnetics, closer spaced soil sampling and occasionally, more detailed mapping. No prospect had seen fixed loop E.M. surveys, dipole-dipole I.P. surveys or drilling of any kind.

Anglo Australian Resources has carried out an evaluation of the gold potential of the tenement and have shown it to be significantly gold anomalous in pan concentrates and in A-horizon peats. The Huminex method, a technique for testing the gold and base metal content (present as metal humates) in the humic acid rich A-horizon peats which develop in the cool humid climate of western Tasmania has been successfully trialled at Thirkell Hill. Because of intense leaching by humic acids, B-horizon soils tend to return low absolute metal values in western Tasmania and well-developed gossans are unlikely to develop.

The work of Anglo Australian Resources and previous explorers has defined 21 prospective zones. Although the tenement is due for 50% reduction in September 1997, the reduced area still contains 14 prospective zones of which only one has been drill tested. At the Hales River East zone, 292.5 metres of diamond drilling in six holes was completed across a gold in Huminex soil anomaly and minor gold mineralisation was intersected. Of the remaining prospective zones, several have been advanced to drill testing stage. In the northern part of the tenement at the D'Aguiar South prospect, another Huminex gold anomaly occurs in an area of highly anomalous gold in pan concentrates, massive silica \pm sericite alteration and intense chlorite \pm pyrite alteration overprinting earlier quartz-sericite alteration. This anomaly has yet to be tested by drilling or ground geophysical technique. The adjacent Mt. Lee zone contains two Geox Dighem EM anomalies, a large magnitude quadrature VLF-EM anomaly and abundant haematite veining associated with Upper Cambrian volcanoclastics occurring near the Upper Cambrian unconformity beneath the Owen Conglomerate, in a similar stratigraphic position to "The Blow" at Mt. Lyell, where a similar haematite occurs. In the southern part of the tenement, work by previous licence holders has upgraded the Conder River West zone to drilling status, while at the southern extremity of the tenement, several prospective zones lie near an interpreted Cambrian transfer fault. New research indicates that major VHMS mineralisation in western Tasmania correlates with the location of Cambrian transfer faults, and in a number of cases, e.g. Rosebery, Mt. Lyell, Que River, the deposits sit on the northern side of transfer faults.

Thirkell Hill is the most under explored part of the Mt. Read Volcanics and the potential for locating major base metal and/or gold mineralisation is excellent.

2.0 INTRODUCTION

2.1 Location

Exploration Licence 3/92 "Thirkell Hill" is located in Tasmania's south-west, lying to the south of the Gordon River and to the south-east of Birch's Inlet (Figure 1).

2.2 Tenure

The Exploration Licence was granted to Mac Mining NL (now Macmin N.L.) on 1/10/92 and joint ventured to Anglo Australian Resources NL on the 25th September, 1992. Anglo Australian Resources NL is operator/manager of the licence and is currently earning 75%. The licence covers an area of 67 square kilometres, to be reduced by half in September 1997.

2.3 Land Status/Usage

The area covered by EL 3/92 is a part of the South West Conservation Area, thus mineral exploration activities are subject to the consideration and the approval of the Mineral Exploration Working Group, an interdepartmental committee comprised of representatives from Industry, Safety and Mines, the Department of Environment and Land Management, the Parks and Wildlife Service and Forestry Tasmania. The window of prospective Mt. Read Volcanics covered by EL 3/92 was excluded from the surrounding World Heritage Area for the purpose of mineral exploration.

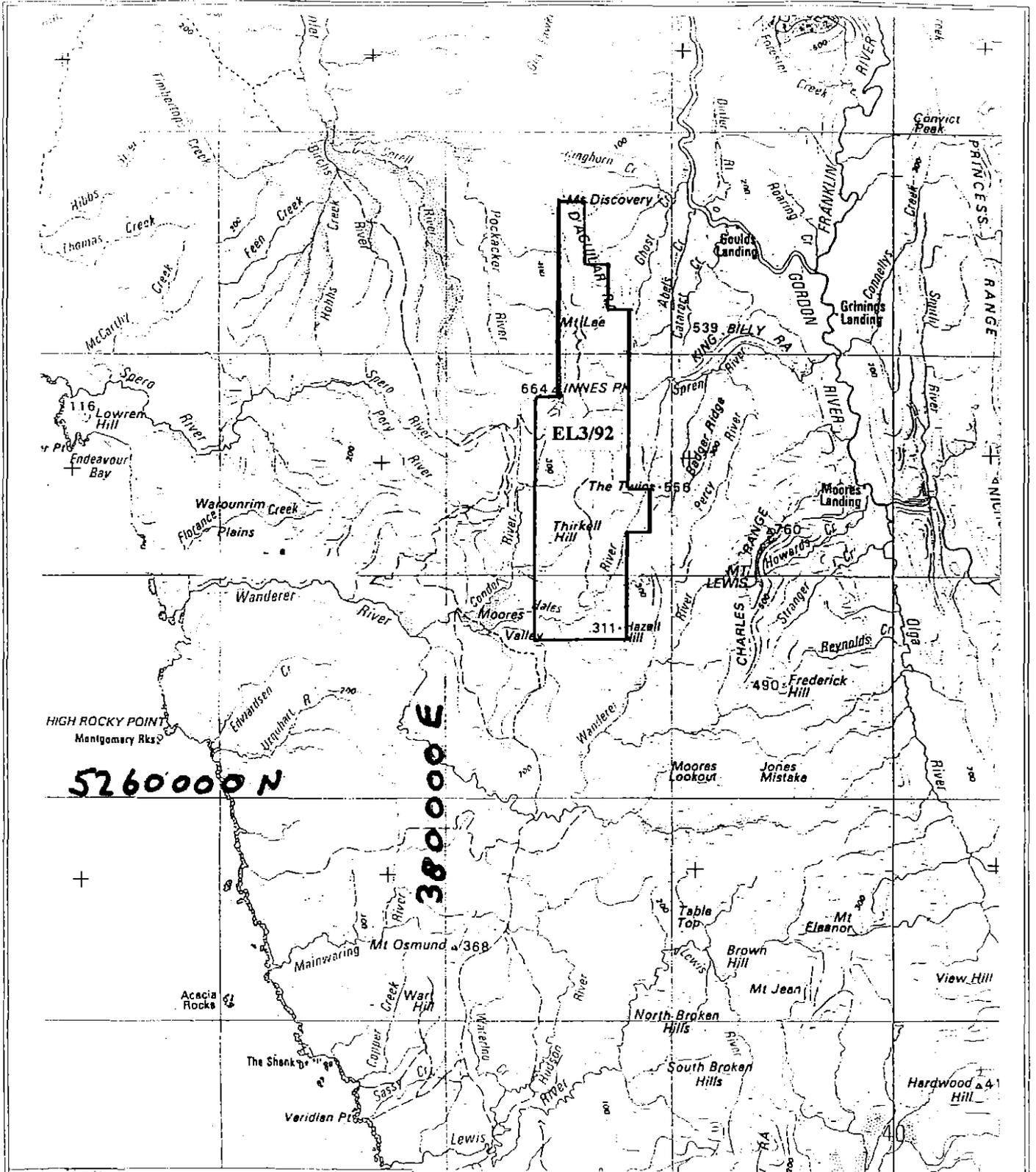
2.4 Topography/Vegetation

In general, the Mt. Read Volcanics occupy a broad topographic low bounded to the west by the D'Aguilar Range, which is comprised of Ordovician siliciclastics, and to the east by a range of hills comprised of Precambrian metasediments. The D'Aguilar South prospect lies marginally to the north of a saddle connecting the two ranges. Most of the volcanics are covered by open button grass heath or thick tea-tree and bauera. The eastern slopes of the D'Aguilar Range are covered by dense rainforest.

Much of the bedrock is covered by a veneer of peat and quartz lag, however outcrop is quite good on the elevated saddle area of the D'Aguilar South area.

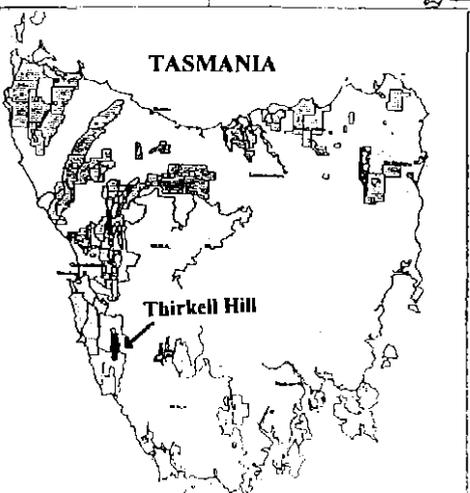
2.5 Access

Access for fieldwork is by helicopter from Strahan (60 kms north-west) or alternatively, a barge or fishing vessel may be used from Strahan to Birchs Inlet and a helicopter used for the last 15 to 25 kilometres. There is also a rough "bombardier" track from Birchs Inlet allowing access for tracked vehicles.

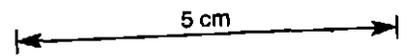


526000 N

380000 E



AMG REFERENCE POINTS ADDED



ANGLO AUSTRALIAN RESOURCES N.L.

Thirkell Hill EL3/92
Location Plan

GEO:	SCALE 1:250000	REPORT: 1997 Annual
DRAWN:	DATE: 13-08-1997	FIGURE: 1

2.6 Exploration Targets

The Mt. Read Volcanics which underlie the Thirkell Hill tenement are prospective for three well defined deposit types:

1. Polymetallic massive sulphides of the Hellyer/Rosebery type with plus 20 Mt at 21% combined Pb-Zn \pm Cu, 160 g/t Ag and 2-3 g/t Au.
2. Mt. Lyell style copper-gold with 100 Mt at 1.3% Cu and 0.4 g/t Au.
3. Henty style structurally controlled, high-grade gold with plus 500,000 tonnes at 30 g/t Au.

2.7 Expenditure

A total of \$14,565 was expended on E3/92 during the period 1/7/96 – 30/6/97.

EXPENSE	AMOUNT
Geologists	6766.91
Assaying	3417.60
Drafting	478.00
Maps & Reports	8.00
Field Expenses	82.43
Meals & Accommodation	84.33
Motor Vehicle Expenses	309.40
Legal Expenses	964.00
Tenement Management Fees	44.37
Mines Department Fees	400.00
Rent	2010.00
TOTAL	\$14565.04

3.0 GEOLOGY

3.1 Regional geology of the Mt. Read Volcanic Belt

The Mount Read Volcanics are of Cambrian age and form an arcuate volcanic belt approximately 220 km long and 5-15 km wide wrapping around the western and northern margin of a block of Precambrian metamorphics termed the Tyennan block.

The Mount Read Volcanics are a sequence of deformed, regionally metamorphosed (lower greenschist facies), largely submarine volcanics which have been hydrothermally altered in many areas.

The lower part of the Mount Read Volcanics has been subdivided into the quartz and feldspar-bearing lavas, intrusions and volcanoclastic units of the Eastern quartz-phyric sequence which interfinger with the feldspar-phyric rhyolitic lavas and very thick, pumiceous volcanoclastic units of the Central Volcanic Complex. These both interfinger with the Western volcano-sedimentary sequences of well-bedded, volcanoclastic and Precambrian basement-derived sandstone and conglomerates. Major base metal mineralisation occurs in units within the Central Volcanic Sequence, including Rosebery, Hercules and Mt. Lyell. Above these are the widespread crystal- and pumice-rich mass-flow deposits of the Southwell Subgroup and Tyndall Group, with the latter being host to the structurally-controlled Henty gold deposit.

A Late Cambrian unconformity marks the upper boundary of the Mt. Read Volcanics, above which lies the Owen Conglomerate, a thick unit of siliciclastic conglomerates and sandstones.

3.2 Geology of the Thirkell Hill area

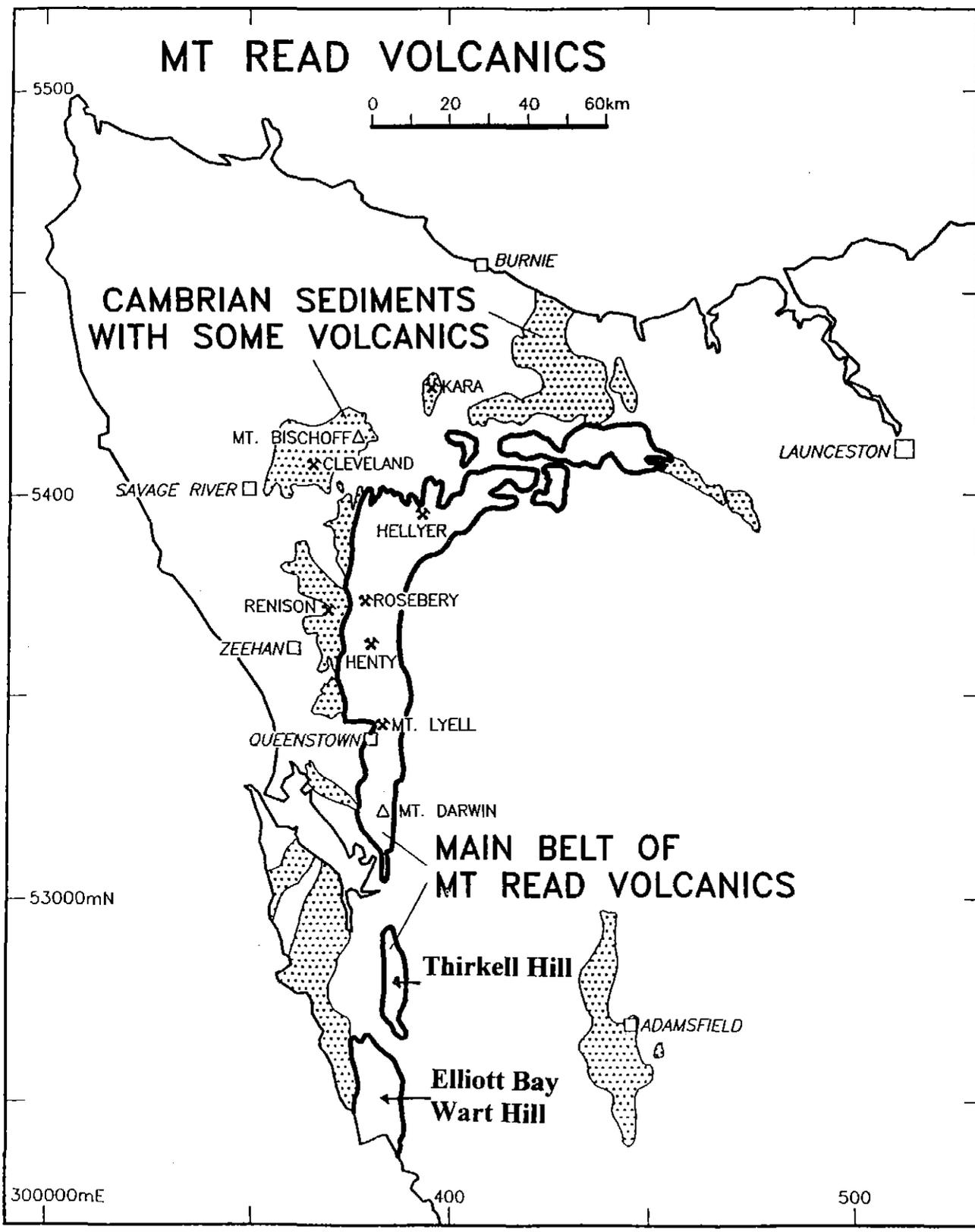
The Thirkell Hill area has been mapped by Mineral Resources Tasmania as part of the Mt. Read Volcanics Project at 1:10,000 and this is the basis for the geology shown in Figure 2. Prospect scale mapping has been conducted over some parts of the licence area.

The Mt. Read Volcanics which outcrop over much of the licence area lie on the eastern limb of a north striking, shallowly north plunging syncline with Ordovician siliciclastics lying in the core of the fold. The western limb of the fold has been downfaulted during formation of a major Tertiary graben. Further south, towards Elliott Bay, part of this western limb is unfaulted and in position and contains high grade, base metal, massive sulphide lenses at Wart Hill. The eastern limb of the syncline in this area, the Mt. Osmond Syncline, contains an almost identical stratigraphy to that further north within E.L. 3/92.

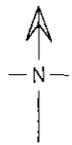
The exact stratigraphic position of the massive sulphide lenses/rafts at Wart Hill has been the subject of much conjecture, however the latest interpretation, based on extensive drilling and trenching, indicates that this horizon or source horizon lies close to the contact with the overlying Waterloo Creek Group. The felsic volcanoclastic conglomerates and sandstones, pyritic shales, and siltstones of the Waterloo Creek Group also outcrop along the western side of the Mt. Read Volcanics within the licence area.

It is this direct correlation with massive sulphide hosting/ sourcing volcanics twenty kilometres to the south at Wart Hill which underpins the prospectivity of the volcanic sequence at Thirkell Hill for base metal VHMS deposits. The same package of rocks which host the massive sulphide lenses is also considered to be prospective for gold near the contact with a large, elongate body of quartz-feldspar-biotite porphyry, with gold mineralisation hosted within a north-east trending shear adjacent to the porphyry. A similar porphyry also occurs at EL 3/92. Correlations with sequences within the Mt. Read Volcanics to the north of Macquarie Harbour are somewhat tenuous, with volcanics at Elliott Bay, other than the Waterloo Creek Group rocks, being suggested as correlates of the Eastern quartz-phyric sequence which occupies the eastern side of the volcanic belt north of Macquarie Harbour, whilst the Waterloo Creek Group has been suggested as a Tyndall Group correlate. Rocks which underlie the Waterloo Creek Group rocks near Mt. Lee in EL 3/92 have also been suggested as looking like Tyndall Group rocks.

The geology within the licence area is shown in Figure 2. The sequence dips at 60° to 70° and faces west.



5 cm



ANGLO AUSTRALIAN RESOURCES N.L.

Thirkell Hill Project
 Geological outline of Mt Read Volcanics
 after Duncan, 1992

GEO:	SCALE	REPORT: 1997 Annual
DRAWN:	DATE: 14-08-1997	FIGURE: 2

Unconformably overlying the Precambrian metasediments, and in faulted contact with Ordovician siliciclastics in the north, is a sequence of coarse to fine grained sediments of mixed Precambrian and volcanic provenance. To the east, this unit is almost completely of Precambrian provenance and is coarse grained. Towards the west, the grain size decreases and the amount of material of volcanic provenance increases. This sequence is a correlate of the Sticht Range Beds further north in the Mt. Read Volcanic Belt.

To the west of these sediments is a large, elongate body of coarsely quartz-feldspar-biotite phyrlic porphyry which is almost certainly a Cambrian intrusive. It too has correlates to the north and the south.

Further west is a package of mixed felsic (quartz-feldspar \pm biotite phyrlic) lavas or intrusives and felsic volcanoclastics. It is these rocks which are considered to have potential for VHMS deposits and also may be prospective for gold deposits near the contact with the porphyry.

Conformably overlying this package is a unit of felsic volcanoclastics overlain in turn by a unit of fine shales/siltstones which together constitute the Waterloo Creek Group. Where seen in the field, these rocks are often sericitic and schistose.

Overlying the Waterloo Creek Group are Ordovician siliciclastics which are correlates of the Owen Conglomerate to the north. There is some debate as to whether the contact is conformable or not.

Of interest in the northern part of the licence area, east of Mt. Lee, is a unit which cuts across the regional strike and which has been mapped by the Mines Department as a "siliciclastic breccia-conglomerate with quartzite clasts". Petrologic examination of samples collected this year indicate that the massive silica may be hydrothermal filling along a fault. The volcanics underlying the silica body are strongly silica-sericite \pm haematite altered.

During the regional Devonian deformation, the volcanic package at Thirkell Hill was folded and now occupies the 60° to 70° west-dipping eastern limb of a major, shallowly north-plunging syncline. A north-south trending sub-vertical cleavage is associated with the syncline. A number of north-west and north-east trending wrench faults have been interpreted from aerial photography.

New work on Cambrian structure in western Tasmania

Results from a study into structure and mineralisation in western Tasmania conducted by AMIRA and the University of Tasmania have recently become available. Recognition of structural complexities which cannot be explained due to regional Devonian deformation combined with changes in thickness of Cambrian stratigraphy have been used to interpret Cambrian structure. Of the three tectonic events required to produce Cambrian structure, only one is synchronous with major mineralisation. A middle Middle Cambrian phase of extensional tectonics has produced a N-S graben with a complex series of largely E-W striking transfer faults. Major VHMS mineralisation correlates with the location of Cambrian transfer faults, and in a number of cases, eg Rosebery, Mt. Lyell, Que River, the deposits sit on the northern side of transfer faults.

The study has recognised potential Cambrian transfer faults in the area south of Macquarie Harbour, where the Thirkell Hill prospect is located. At Wart Hill, 10 kilometres south of the southern end of the Thirkell Hill prospect two small lenses of high grade, sphalerite-galena massive sulphide hosted in sericite, chlorite and carbonate altered rhyolitic volcanics are located on a Cambrian transfer

fault. The texture and grade of the lenses were considered to be similar to Rosebery style mineralisation.

At the southern end of the Thirkell Hill prospect, a Cambrian transfer fault is inferred from the anomalous ESE strike of a Tertiary basin boundary fault at Moores Valley. Several prospective zones lie close to, or immediately north of, the fault and are described below:-

a) The Viking 15 prospect is the location of a single, strong McPhar H-400 anomaly with a follow-up VLF-EM traverse revealing a very large and sharp in-phase and quadrature anomaly. A single 600 metre traverse over sericite-altered volcanoclastics containing disseminated pyrite using a hand auger to sample the C-horizon revealed anomalous Zn (199 ppm), Pb (73 ppm), Cu (24 ppm) and As (47 ppm) at auger sites near the centre of the anomaly.

b) The Hales River West zone includes a broad zone of Cu, Pb and Zn stream sediment anomalism, anomalous Cu, Pb and Zn soil geochemistry, two Georex airborne EM anomalies and massive, fine grained rhyolitic quartz-feldspar porphyritic-lava, containing locally extensive sericitisation, minor sulphides, magnetite and lithic-crystal tuffs.

c) The Hales River East zone is associated with anomalous Cu, Pb and Zn stream geochemistry, anomalous Pb and Zn in C-horizon soils, anomalous Au, Pb and Zn in Huminex soils and pyritic volcanics with one rock chip assaying at 167ppb Au.

d) The Thirkell Hill South zone contains a 2 km long strong Georex airborne EM anomaly, a DigheM EM anomaly and anomalous Cu in stream sediments.

e) Viking 14 is a small area containing two Georex airborne EM anomalies coincident with two DigheM EM anomalies. Follow up VLF-EM and magnetics survey produced inconclusive results.

Another Cambrian transfer fault of limited strike length is located about 14 kilometres north of the Moores Valley fault, evidence being a change in thickness of the Sticht Range Formation at the base of the Cambrian section. Anomalous gold (53.76 μg), including visible gold, in a pan concentrate occurs in this area but there are no geophysical anomalies or other significant geochemistry in the near vicinity.

4.0 PREVIOUS EXPLORATION

Exploration has been limited and sporadic over the past twenty odd years. The two main players have been Union Oil Development Corp. and Geopeko. In 1975, UODC put in an access track from Birch Inlet, with numerous internal tracks, and also cut some 31 kilometres of grid lines on east-west lines spaced 800m apart over the central and southern parts of the volcanic belt. In 1977, Geopeko cut approximately 15 kilometres of grid lines over selected prospects and airborne EM anomalies.

Geophysics

February, 1973	Scintrex Turair survey over the northern third of the area (Australasian Minerals).
March, 1975	Gradient array IP of 21 line kms over southern half of the area (Union Oil).
April, 1975	Geoex M-400M survey over southern third of area (Union Oil)
February, 1977	VLf-EM, some ground magnetics and gradient array IP over some aeromagnetic anomalies (Geopeko).
December, 1980	Dighem II survey over entire EL (Geopeko).

Geochemistry

1973	Reconnaissance soil and rock chip sampling (Australasian Minerals).
1975	129 stream sediment, 1294 soil (10 centimetre depth) samples, and 42 rock chip samples (Union Oil).
1977	82 rock chip samples, 959 stream sediment samples, 308 hand and Jacro auger samples (Geopeko).
1981	174 hand auger samples (Geopeko).
1985	13 stream sediment samples for gold (C.S.R.).
1993	35 pan concentrates for gold (AAR/Macmin).
1994	119 panned concentrates for gold, 41 rock chip samples, 342 Huminex (A-horizon) soil samples, 48 C-horizon soil samples (AAR/Macmin).
1995	292.5 metres of diamond drilling in six holes, 33 C-horizon "wacker" soil samples, 24 Huminex (A-horizon) soil samples (AAR/Macmin)
1996	38 rock chip samples, 83 Huminex (A-horizon) soil samples, 96 C-horizon soil samples (AAR/Macmin).

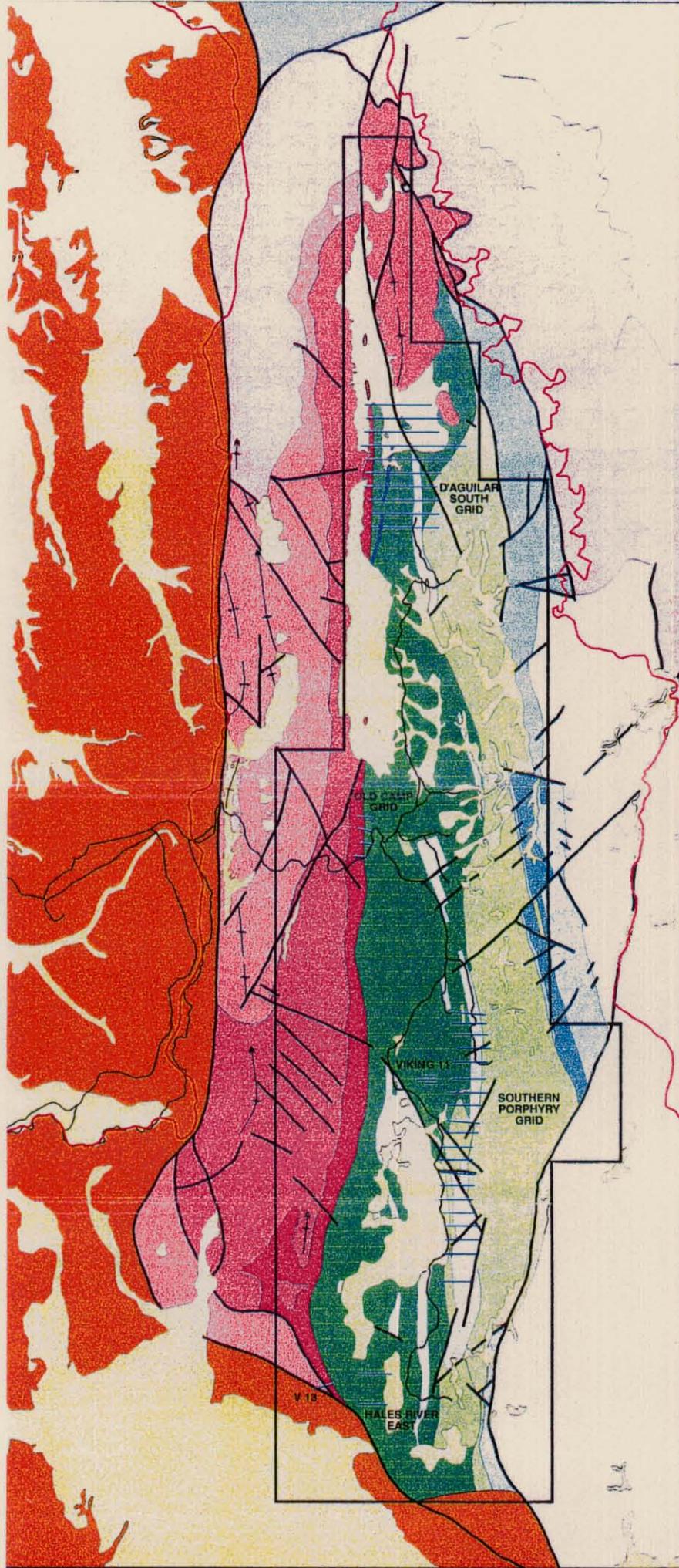
5.0 WORK CONDUCTED AND RESULTS

No field work was conducted this year.

6.0 WORK CONDUCTED IN AREAS TO BE RELINQUISHED

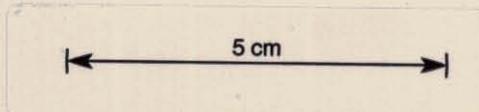
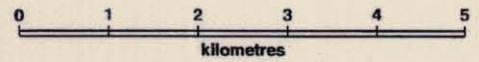
Very little exploration has been carried out in the areas to be relinquished.

Some C-horizon augering was carried out at the Old Camp Grid (Figure 3) with disappointing results. Some Huminex sampling in the northern part of the Hales River East zone, or Southern Porphyry Contact grid (Figure 3) extended into the area now relinquished, however the areas with best results have been retained. Some pan concentrates with anomalous gold were also taken which helped define anomalous drainage basins, but these occur mainly within the retained area, except for an area to the north of the Sprent River, in the far east of the tenement between 78 000 and 82 000 mN.



LEGEND

- QUATERNARY** Talus, scree, younger and older alluvium + fan deposits.
 - TERTIARY** Semi-consolidated interbedded sands, pebble-cobble gravels, silts and clays.
 - SILURO - DEVONIAN** Undifferentiated sandstone, siltstone and shale.
 - ORDOVICIAN** Limestone with some associated siltstone and sandstone.
 - OWEN CONGLOMERATE AND DENISON GROUP**
 - Well-bedded sandstone and chert-bearing gritty sandstone, plus thickly bedded to massive pebble-cobble conglomerate.
 - Trough cross-bedded sandstone with intercalations of pebble conglomerate.
 - Granule-pebble to pebble-cobble conglomerate with interbedded sandstone and minor siltstone.
 - Pyritic shale and siltstone, plus volcanoclastic conglomerate and sandstone.
 - ? EARLY ORDOVICIAN - ? LATE CAMBRIAN**
 - Cream to pink felsic lava with minor intercalated epiclastic rocks and lava breccias.
 - Felsic volcanoclastic and epiclastic rocks.
 - Siliciclastic breccia-conglomerate unit, with quartzite clasts.
 - Quartz-feldspar-biotite-phyric lava and / or intrusive.
 - Siliciclastic to volcanoclastic bedded siltstone, sandstone and shale.
 - Siliciclastic sandstone and granule-pebble conglomerate.
 - CAMBRIAN**
 - Coarse grained quartz-feldspar-biotite porphyry.
 - Fine to medium grained quartz-feldspar-biotite-phyric lava and / or intrusive.
 - PRECAMBRIAN** Undifferentiated quartzite, phyllite, schist.
-
- Geological boundary
 - Fault
 - ++ Axial surface trace of major anticline.
 - ++ Axial surface trace of major syncline.
 - Track
 - World Heritage area boundary.
 - || Boundary of E.L. 3/92
 - Gridded area



A.A.R. / MAC MINING N.L.

**E.L. 3/92
GEOLOGY**

Date: OCTOBER 1992

Compiled: P.A.M./G.M. Drawn: NORTHPOINT

figure 3.

6.0 CONCLUSIONS AND RECOMMENDATIONS

The licence area is due for 50% reduction in September, 1997 and the areas to be relinquished are shown on Figure 4. The relinquished areas are considered to be of low prospectivity, with limited geophysical and/or geochemical anomalism. The reduced area retains the most prospective zones including D'Aguilar South, Mt. Lee, Thirkell Hill South, Viking 15, Hales River West, Hales River East, Conder River, Conder River West, Conder River East and Viking 14. Of these, the previous major explorer (Geopeko) had recommended follow-up on 7 prospective zones, however they carried out work on only one zone, upgrading it to drilling status, concentrating instead on the volcanics along strike to the south at Wart Hill, where lenses of high grade base metal had been discovered. In 1984, Geopeko underwent an exploration rationalisation and withdrew from Tasmania completely. The recommendations for further work made by Geopeko are still warranted. In addition, work done by Anglo Australian Resources combined with new research into the structural setting of major mineralisation in western Tasmania has upgraded the prospectivity of several more zones. Prospective zones are shown in Figures 4 and 5, and their prospectivity is summarised below:

D'Aguilar South

- Widespread drainage anomalism in Cu, Pb and Zn.
- Highly anomalous gold in pan concentrates including six pans with visible gold.
- Broad zone of anomalous gold in Huminex soils.
- Massive silica \pm sericite \pm haematite alteration. Rock chip of massive silica assayed at 125 ppb Au, with euhedral cavities probably after pyrite.
- Intense chlorite \pm pyrite alteration overprinting earlier quartz-sericite altered volcanoclastics.

Mt. Lee

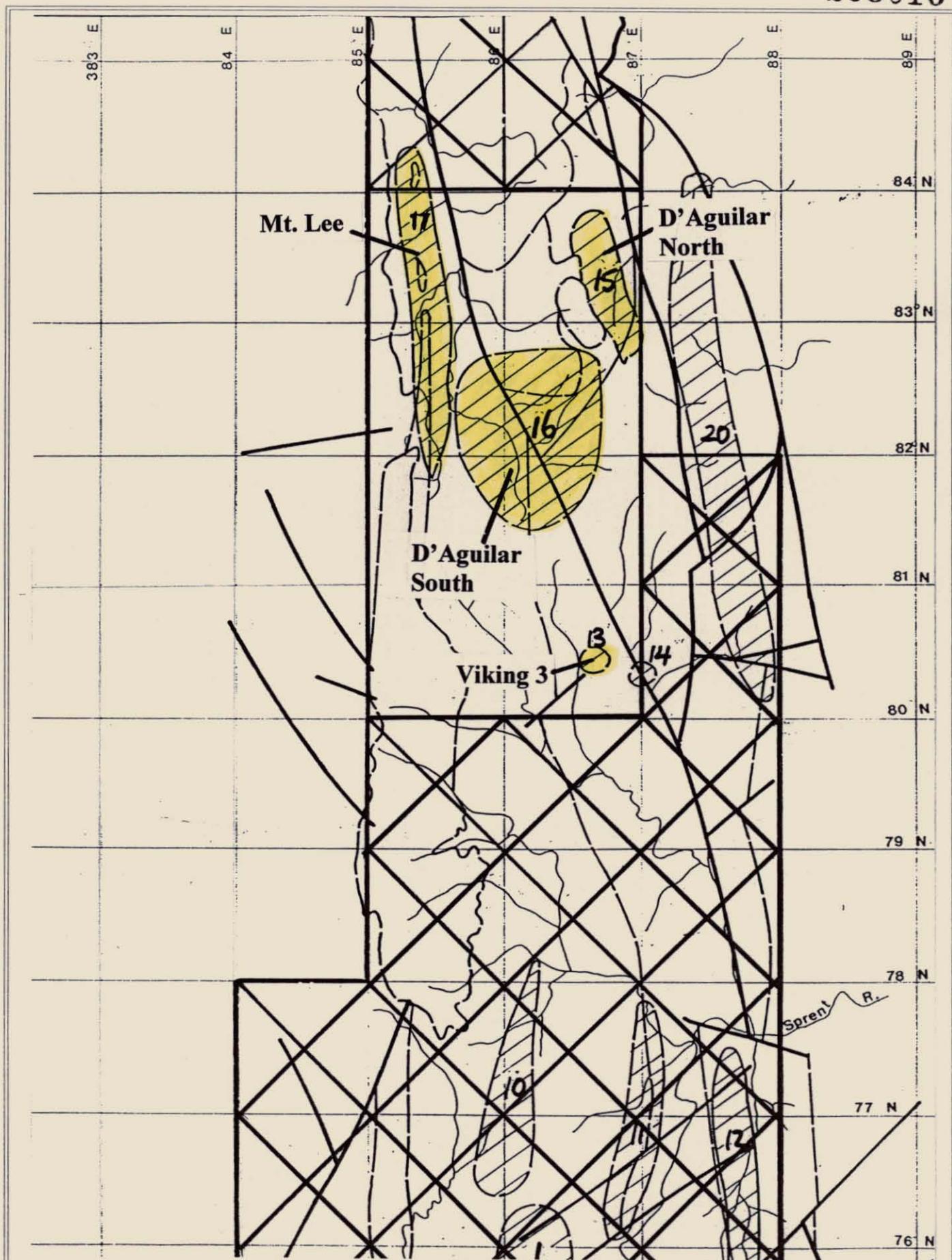
Situated near the north-west corner of the licence area:

- Two Geox Dighem EM anomalies.
- Large magnitude quadrature VLF-EM anomaly.
- Cu, Pb, Zn anomalous C-horizon geochemistry.
- Abundant haematite veining associated with Upper Cambrian volcanoclastics occurring near the Upper Cambrian unconformity beneath the Owen Conglomerate, in a similar stratigraphic position to "The Blow" at Mt. Lyell, where a similar haematite occurs.

Viking 15

Small zone very near Tertiary basin boundary fault at extreme south of tenement associated with:

- Geox airborne EM anomaly.
- Very large and sharp in-phase and quadrature VLF-EM anomaly.
- Cu, Pb, Zn and As anomalous B/C-horizon geochemistry near centre of VLF-EM anomaly (Zn to 199 ppm, Pb to 73 ppm, Cu to 24 ppm and As to 47 ppm).
- lithic-crystal volcanoclastic containing disseminated pyrite.



ANGLO AUSTRALIAN RESOURCES N.L.

**Thirkell Hill Project
PROSPECT ZONES
North Sheet**

GEO:	SCALE 1:40000	REPORT: 1997 Annual
DRAWN:	DATE: 14-08-1997	FIGURE: 4

383 E

84 E

85 E

86 E

87 E

88 E

76 N

75 N

74 N

73 N

72 N

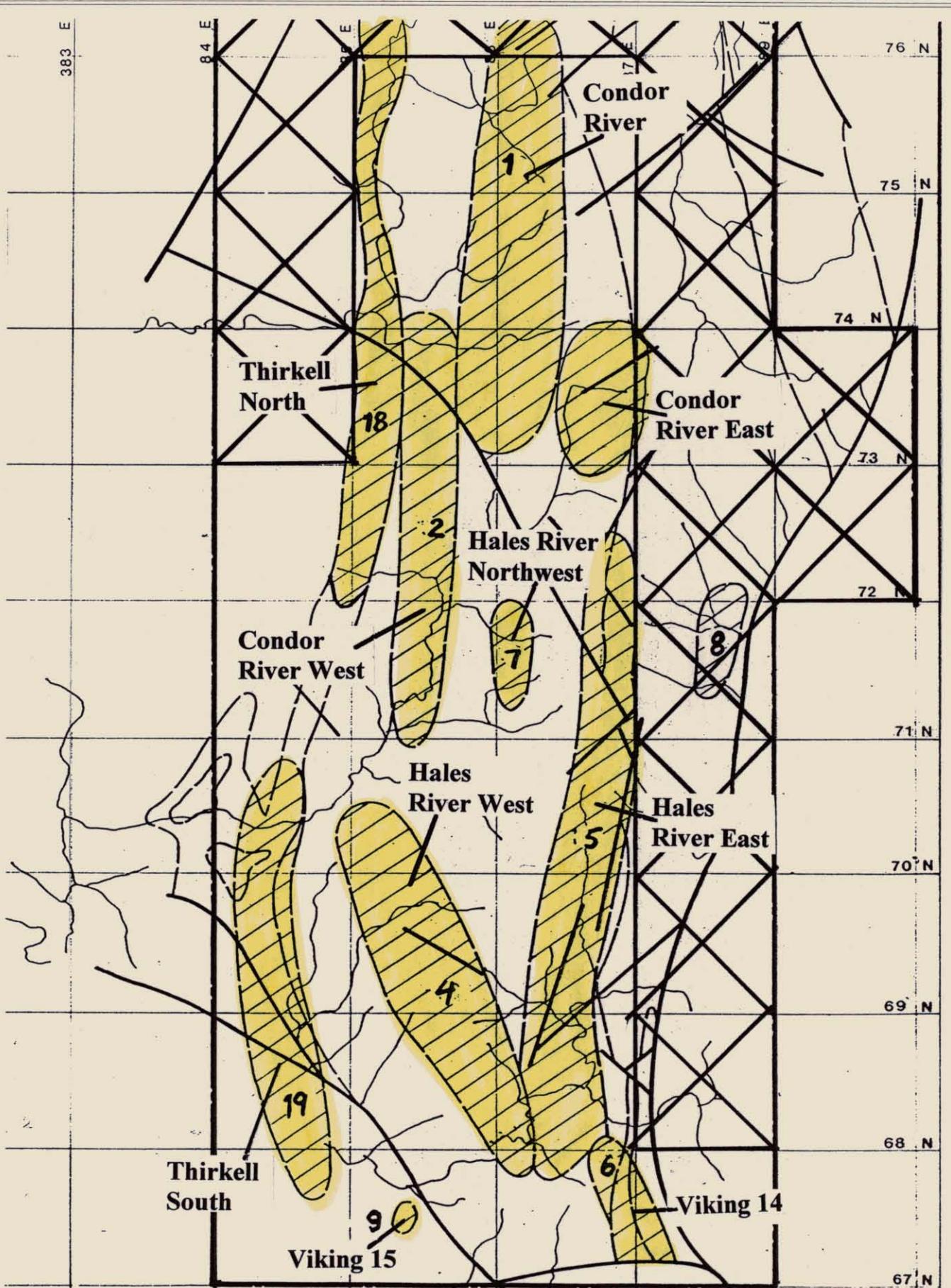
71 N

70 N

69 N

68 N

67 N



ANGLO AUSTRALIAN RESOURCES N.L.

**Thirkell Hill Project
PROSPECT ZONES
South Sheet**

GEO:	SCALE 1:40000	REPORT: 1997 Annual
DRAWN:	DATE: 14-08-1997	FIGURE: 5

Thirkell Hill South

A 3 km long narrow zone located south of Thirkell North and covering a similar stratigraphic position.

- 2 km long, strong Geox airborne EM anomaly.
- Dighem airborne EM anomaly.
- Cu anomalous stream sediment geochemistry.
- Minor pyrite.

Hales River West

Situated in the southern part of the main volcanic belt within a broad belt of stream sediment anomalism which also includes the Hales River East zone associated with:

- Cu, Pb and Zn anomalous stream sediment geochemistry (to 240 ppm Pb).
- Cu, Pb and Zn anomalous soil geochemistry.
- Cu, Pb and Zn anomalous C-horizon geochemistry (Pb to 860 ppm, Zn to 888 ppm).
- Two Geox airborne EM anomalies.
- Locally extensive sericitisation, minor sulphides, magnetite.

Hales River East

Northerly trending, linear zone to the east of the Hales River West zone and associated with:

- Cu, Pb and Zn anomalous stream geochemistry.
- Pb and Zn anomalous soils.
- Cu anomalous C-horizon (up to 50 ppm).
- Anomalous Au, Pb and Zn in Huminex samples.
- Pyritic volcanics anomalous in gold (167 ppb Au in rock chip)

Viking 14

Small zone defined by geophysics anomaly:

- Two Geox airborne EM anomalies coincident with two Dighem EM anomalies.
- VLF-EM and magnetics survey with inconclusive results.

Conder River

A 3 km by 1 km area within the western part of the main volcanics associated with:

- Cu, Pb and Zn anomalous stream sediment geochemistry.
- Pb and Zn anomalous soils.
- Pb and Zn anomalous C-horizon geochemistry (Pb to 560 ppm, Zn to 870 ppm).
- IP anomaly.
- Geox "possible AEM anomaly".
- Pan concentrate gold anomaly.

Conder River West

285018

A 0.3 km by 3.5 km long zone situated near the western margin of the main volcanics and associated with:

- Three Geox airborne EM anomalies, one of which was considered to be the most significant of the survey.
- Three IP anomalies.
- Pb and Zn anomalous soils.
- Cu, Pb and Zn anomalous C-horizon geochemistry (Pb to 1190 ppm, Zn to 870ppm).
- Zone of low resistivity/high conductivity coincident with soil/auger geochemical anomalism.
- An east-west trending VLF-EM anomaly.
- A pan concentrate gold anomaly.
- Significant sericite alteration and veining.

Conder River East

A small zone associated with:

- Pb and Zn soil anomalies (to 260 ppm Pb).
- Geox airborne EM anomaly and more or less coincident Dighem EM anomaly.

Thirkell North

A long narrow zone extending for seven kilometres along the west of the licence area and covers the Waterloo Creek Group and the contact with the main volcanics to the east and is associated with the following:

- Geox airborne EM anomalies.
- Dighem airborne EM anomalies.
- Four IP anomalies.
- Cu, Pb and Zn anomalous soils.
- Zn anomaly in stream sediments.
- Pan concentrate gold anomaly.
- Possible VLF-EM anomaly.
- Pyritic, black shale horizons with trace copper, lead and zinc.

Hales River Northwest

Small zone defined by soil geochemistry:

- Weakly anomalous Pb in soils.

Viking 3

- Turair EM anomaly classified as significant.
- VLF-EM failed to locate the airborne anomaly.
- Minor traces of sulphides

D'Aguilar North

Located in the extreme northern part of the main volcanic zone and associated with:

- Turair EM anomaly.
- VLF-EM indicates two large conductors, but topographic relief effects make interpretation inconclusive.
- Pb and Zn anomalous stream sediment geochemistry
- Zn anomalous rock chip.
- Pb and Zn anomalous soils.
- Volcaniclastics containing extensive sericitic alteration and minor haematite. Chloritic, haematite veined sedimentary breccia horizon. Sandstone containing significant haematite.

Future work should be carried out as separate programs in areas of related potential as follows:

High Priority

- | | |
|-----------------|--|
| D'Aguilar South | - Drill testing of massive silica body and area of intense chlorite \pm pyrite alteration associated with highly anomalous gold in pan concentrates (Figures 6 and 7). A dipole-dipole IP survey could also be carried out across the D'Aguilar South and Mt. Lee prospects. |
| Mt Lee | - Gridding, mapping, C-horizon auger sampling, ground EM, dipole-dipole IP in conjunction with D'Aguilar South prospect. |

High Priority

- | | |
|---------------------|--|
| Thirkell Hill South | - Gridding, C-horizon auger sampling, dipole-dipole IP, ground EM. |
| Viking 15 | - Gridding, C-horizon auger sampling, ground EM. |
| Viking 14 | - Gridding, mapping, C-horizon auger sampling, ground EM. |
| Hales River West | - Gridding, C-horizon auger sampling, ground EM. |
| Hales River East | - Gridding, C-horizon auger sampling. |

Moderate Priority

- | | |
|-------------------|--|
| Thirkell North | - Central part of zone: gridding, mapping, C-horizon auger sampling, dipole-dipole IP and ground EM. |
| Conder River West | - E-W grid over entire zone, C-horizon auger sampling, ground EM, drill testing. |
| Conder River | - Extension of C-horizon sampling, ground EM |
| Conder River East | - Several lines of C-horizon auger sampling. |

Moderate Priority

D'Aguilar North - Gridding, C-horizon auger sampling, ground magnetics and EM.

Low Priority

Viking 3 - Gridding, C-horizon auger sampling, ground EM

Low Priority

Hales River NW - C-horizon auger sampling.

8.0 REFERENCES

Duncan, D. McP. 1992. *Tasmania Department of Mines programs - MRVP, NETGOLD and AMB*. Geological Survey Bulletin 70. Tasmania Department of Mines.