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FINAL REPORT
 EXPLORATION LICENCE 16/78
 MEREDITH
 TASMANIA

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1. SUMMARY

The Meredith Exploration Licence 16/78 was acquired in 1978 with the prime objective of locating tin-tungsten mineralisation for treatment in the Cleveland mill. Successive exploration programmes based on regional mapping, stream, soil and rock geochemistry, and DIGHEM follow-up, lead to diamond drilling of a skarn occurrence on Mt. Youngbuck with disappointing results.

During 1983, the licence was reduced in area to comply with revised tenure conditions, and exploration was directed towards evaluating the potential for commodities other than tin. This action was prompted by Aberfoyle's unfavourable perception of the tin-tungsten market for the foreseeable future.

Old silver-lead-zinc-copper workings are known in ultramafics in the Mt. Stewart-Mt. Jasper region and in fault bounded limestone along the Godkin trend. These occurrences have very limited potential for further significant mineralisation.

Potential still exists on the property for tin targets and the more conceptual hard-rock chromite and platinoid association. Alluvial potential is virtually discounted on account of immature drainage.

The property is now in its final years of life when expenditure commitments are at their greatest. Limited potential and intensive work elsewhere in the State precludes high levels of expenditure on the licence. It is recommended that the property be relinquished.

2. INTRODUCTION

On April 4, 1985, following a six month extension period to conduct specific reconnaissance exploration for commodities other than tin, Aberfoyle Exploration Pty Ltd informed the Director of Mines of their intention not to apply for renewal of Exploration Licence 16/78.

This document represents the final report on Exploration Licence 16/78 - Meredith and as such contains a summary of work undertaken during the term of the licence and some new information obtained since the last report on activities for the year ended October 20, 1983. Details of particular programmes are contained in the relevant progress reports which are referenced in the appropriate sections.

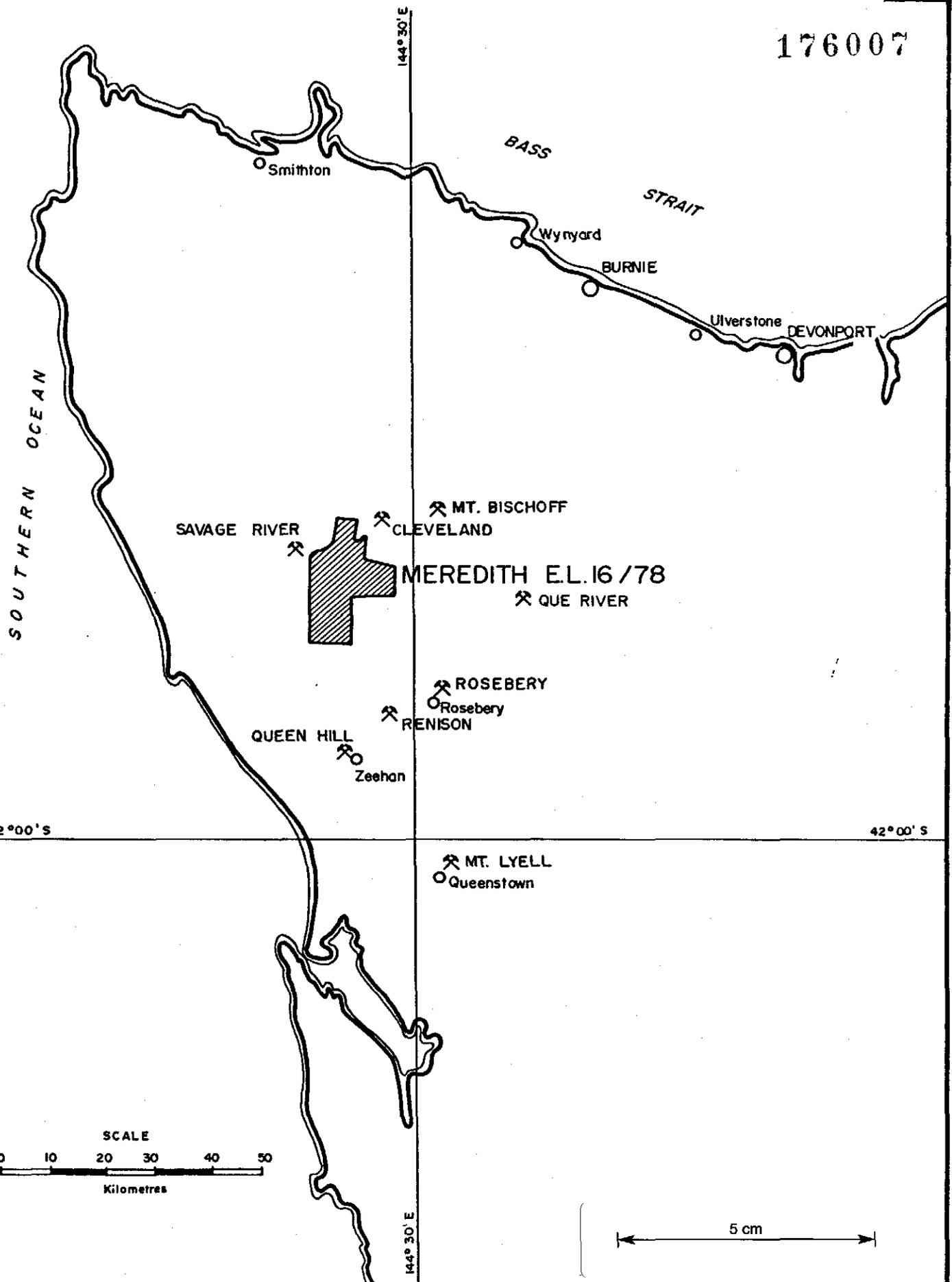
3. ACQUISITION AND INITIAL PROGRAMME

The Meredith Exploration Licence 16/78 of 255 square kilometres (Plate MER 12) was acquired by Aberfoyle Exploration Pty Ltd in 1978 with the prime objective of discovering tin and tungsten mineralisation for treatment in the Cleveland mill.

The Meredith Granite area, in particular the northern contact zone with Cambrian sediments, was considered to have good potential for replacement tin deposits of the Renison-Cleveland type and contact tin and tungsten skarn mineralisation of the Mt. Lindsay - Mt. Ramsay style. The granite itself had potential for greisen and breccia-pipe tin mineralisation. Reactive carbonate horizons known to exist within the Ordovician-Silurian sediments offered

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NORTH WEST TASMANIA
 MEREDITH EL.16/78
 Locality Map

Location code:	
Date:	September, 1979
Scale:	1 : 1,000,000
Plate No	Mer. 12

possibilities for replacement or skarn mineralisation of the Kara, Moina style. In addition to the tin-tungsten potential, the Heazlewood Ultramafic Complex was known to host small tonnage but high grade silver-lead-zinc and copper mineralisation, with old workings such as those at Mt. Stewart warranting investigation.

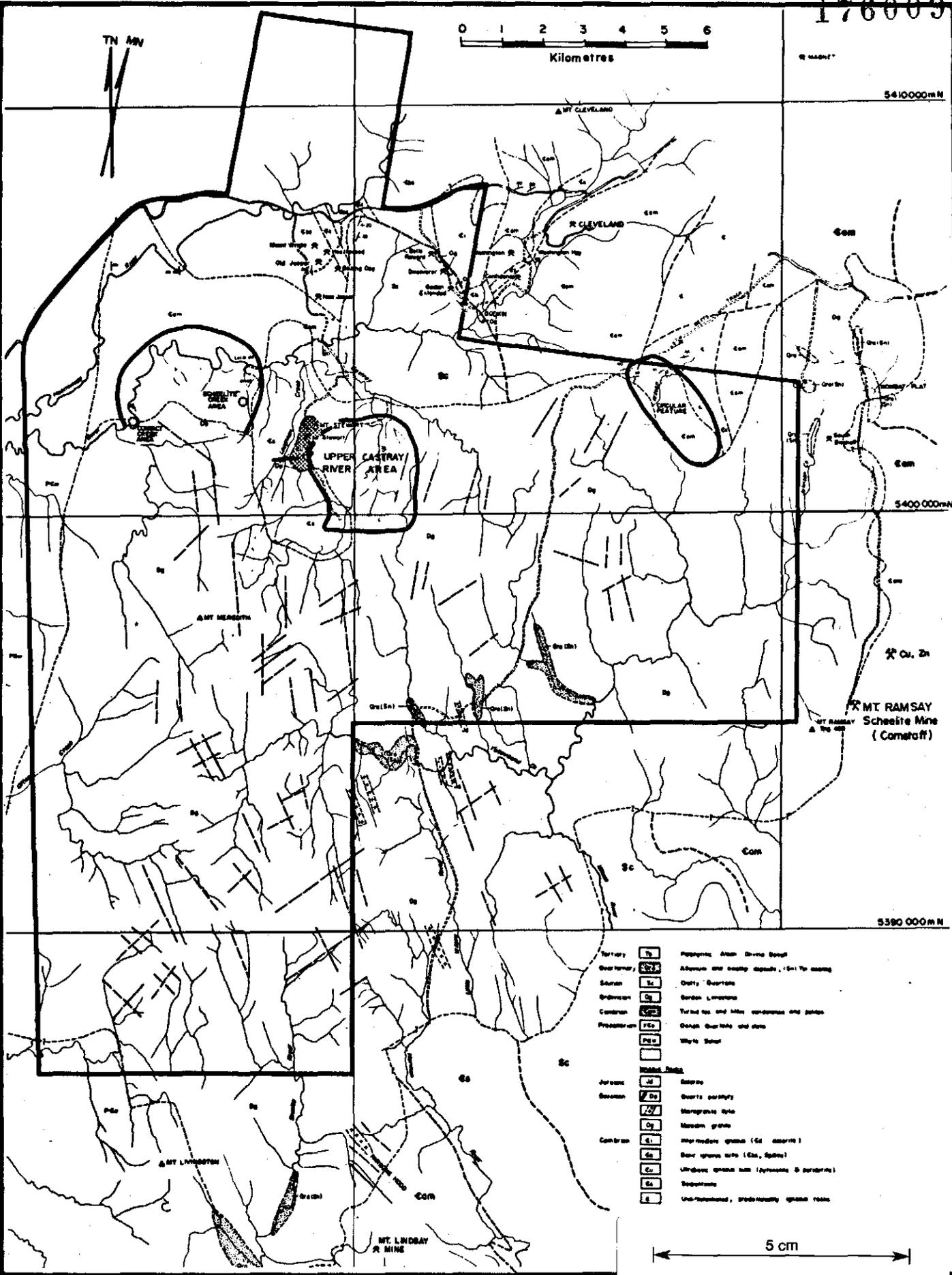
The initial report on the licence, White et al. (1979), based principally on literature review and compilation work, describes topography and access, gives an account of previous exploration in the area conducted by Comstaff Pty Ltd and ANZECC, and describes aspects of regional geology, structure and recorded mineralisation.

In the summer of 1978/79, following a literature review and compilation of previous exploration data, a reconnaissance programme of stream sediment sampling and geological mapping at air photography scale (1:15,000) was initiated. Aberfoyle sampling was confined to the areas not covered by previous explorers, except where anomalous tin and tungsten had been outlined. 360 stream sediment samples were collected at an average frequency of 6 per square kilometre. Samples were reduced in the field by a 12 mesh sieve and later dried and sieved through 80 mesh. All samples were routinely analysed for Sn and W by XRF and Cu, Pb, Zn by AAS. Selected samples were also run for Mo and As by XRF. Geological mapping was accomplished primarily by stream traverses supplemented by exposure on the rather infrequent tracks. Fact geology was plotted on 1:10,000 scale base plans.

Three distinct zones with tin-tungsten potential were outlined by the integrated geological and geochemical programme (Plate MER 11). These areas known as Contact Creek - Scheelite Creek, Upper Castray River and Bett's Track - Circular Feature (Plates MER 13 and 14) are

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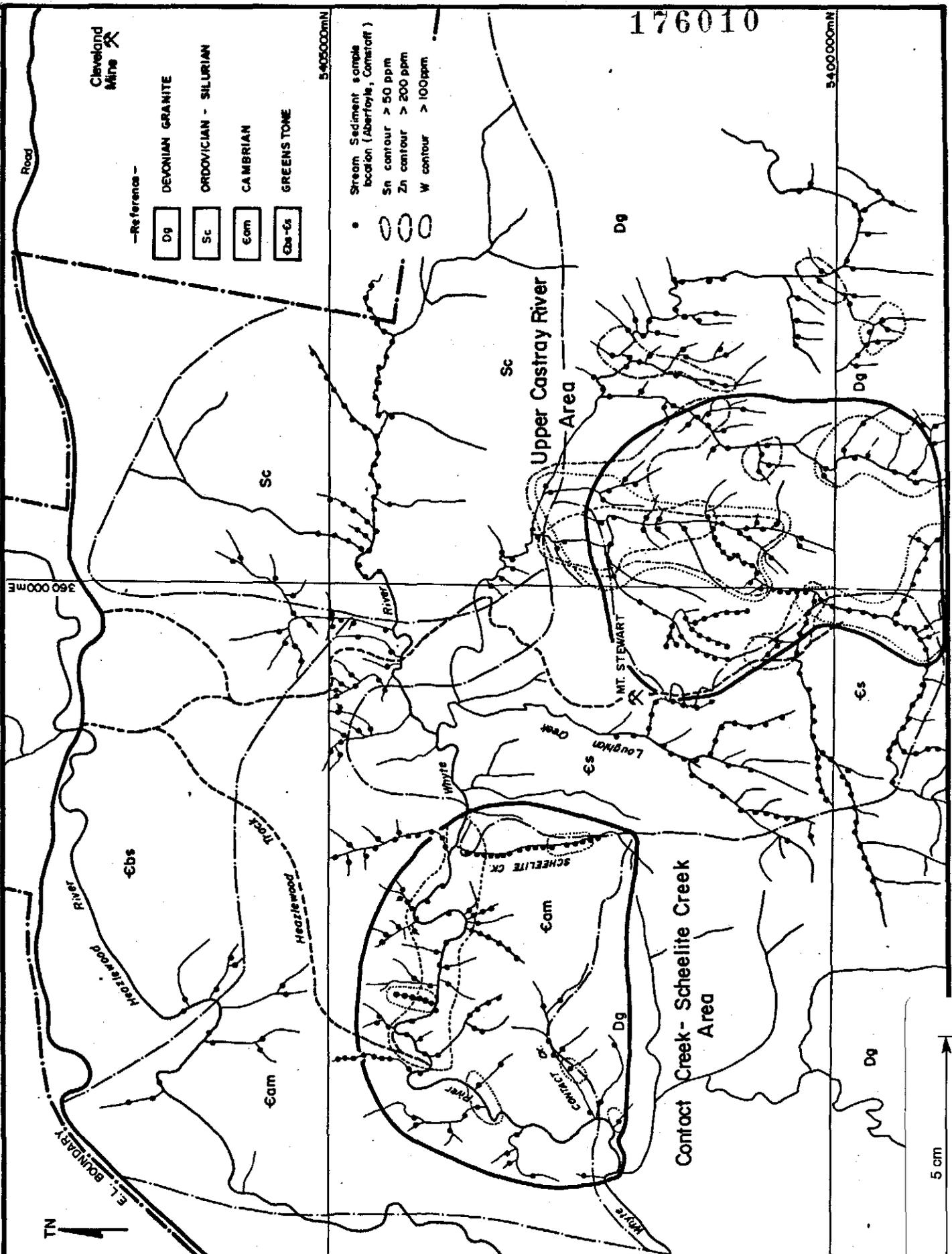
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 Revised by: Date:

NORTH WEST TASMANIA
 MEREDITH E.L. 16/78
 Geological Summary Map

Location code:
 Date: September, 1979
 Scale: 1: 125,000
 Plate No Mer II

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-Reference-

Dg	DEVONIAN GRANITE
Sc	ORDOVICIAN - SILURIAN
Cam	CAMBRIAN
Es-Gs	GREENS TONE

Stream Sediment sample location (Aberfoyle, Comstaff)

• Sn contour > 50 ppm
 • Zn contour > 200 ppm
 • W contour > 100ppm



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NORTH WEST TASMANIA
 MEREDITH E.L.16/78
 Summary of Stream Sediment
 Geochemistry

Location code:	
Date:	September, 1979
Scale:	1 : 50,000
Plate No	Mer 13

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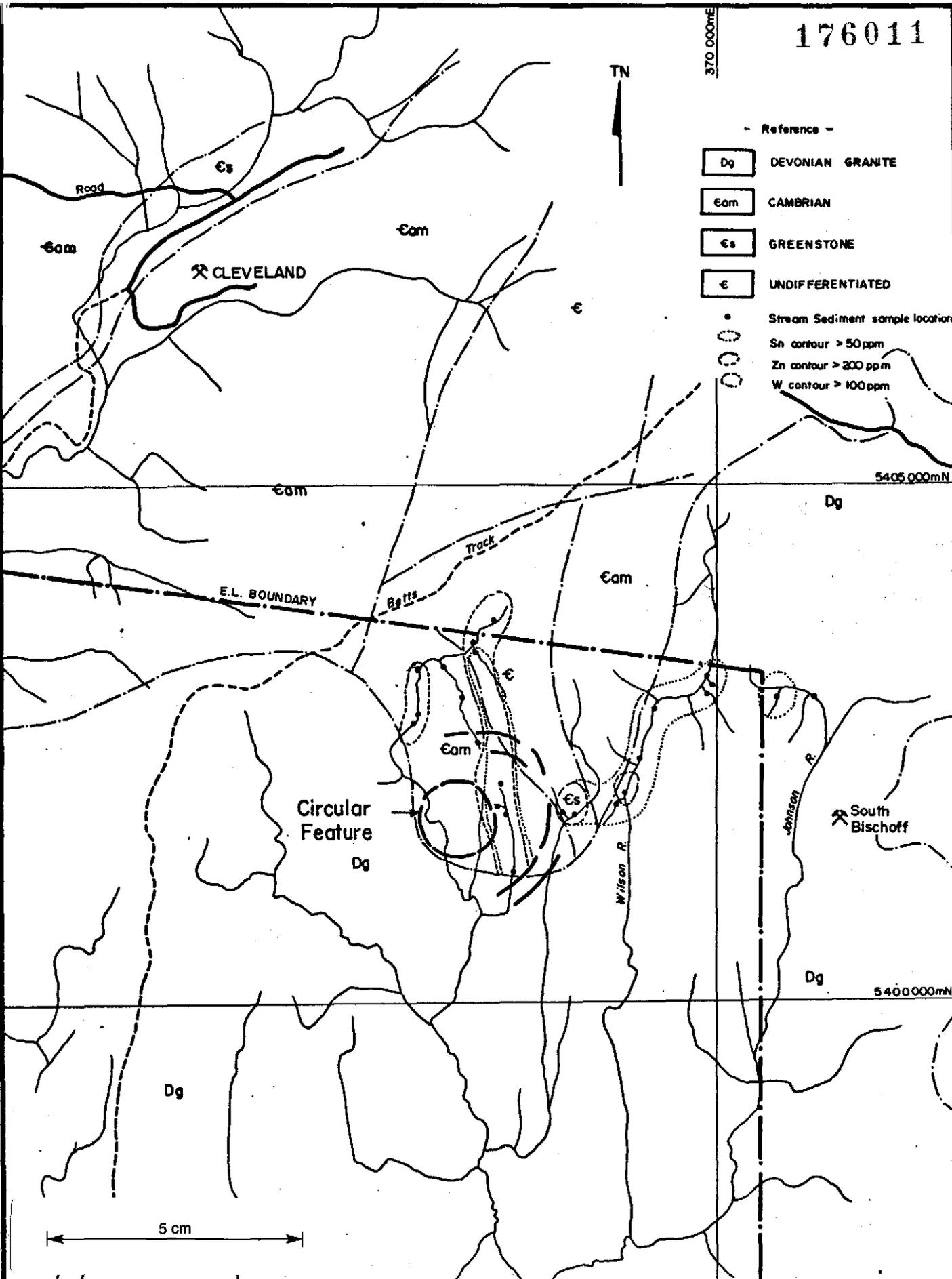
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TN

- Reference -

- Dg DEVONIAN GRANITE
- Eam CAMBRIAN
- Es GREENSTONE
- E UNDIFFERENTIATED

- Stream Sediment sample location
- Sn contour > 50 ppm
- Zn contour > 200 ppm
- W contour > 100 ppm



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Drawn: R.J.E.
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NORTH WEST TASMANIA
 MEREDITH E.L.16/78
 Summary of Stream Sediment Geochemistry in
 Vicinity of Circular Feature

Location code:
 Date: September, 1979
 Scale: 1:50,000
 Plate No Mer 14

011

described in Young (1979). Follow-up work on these anomalies was subsequently proposed and conducted during the following summer season.

4. 1979/80 FOLLOW-UP PROGRAMME

Follow-up exploration work during the 1979/80 summer season (Joyce, 1980a) included the establishment of more than 20 km of walking track through the anomalous areas. 236 stream sediment samples, 833 base of slope and grid soil samples, and 150 rock chip samples were collected. A total of 31.2 line km of ground proton magnetometer traverses were also conducted. The following extract from Joyce (1980a) describes the work completed on the three anomalous areas:

BETT'S TRACK AREA

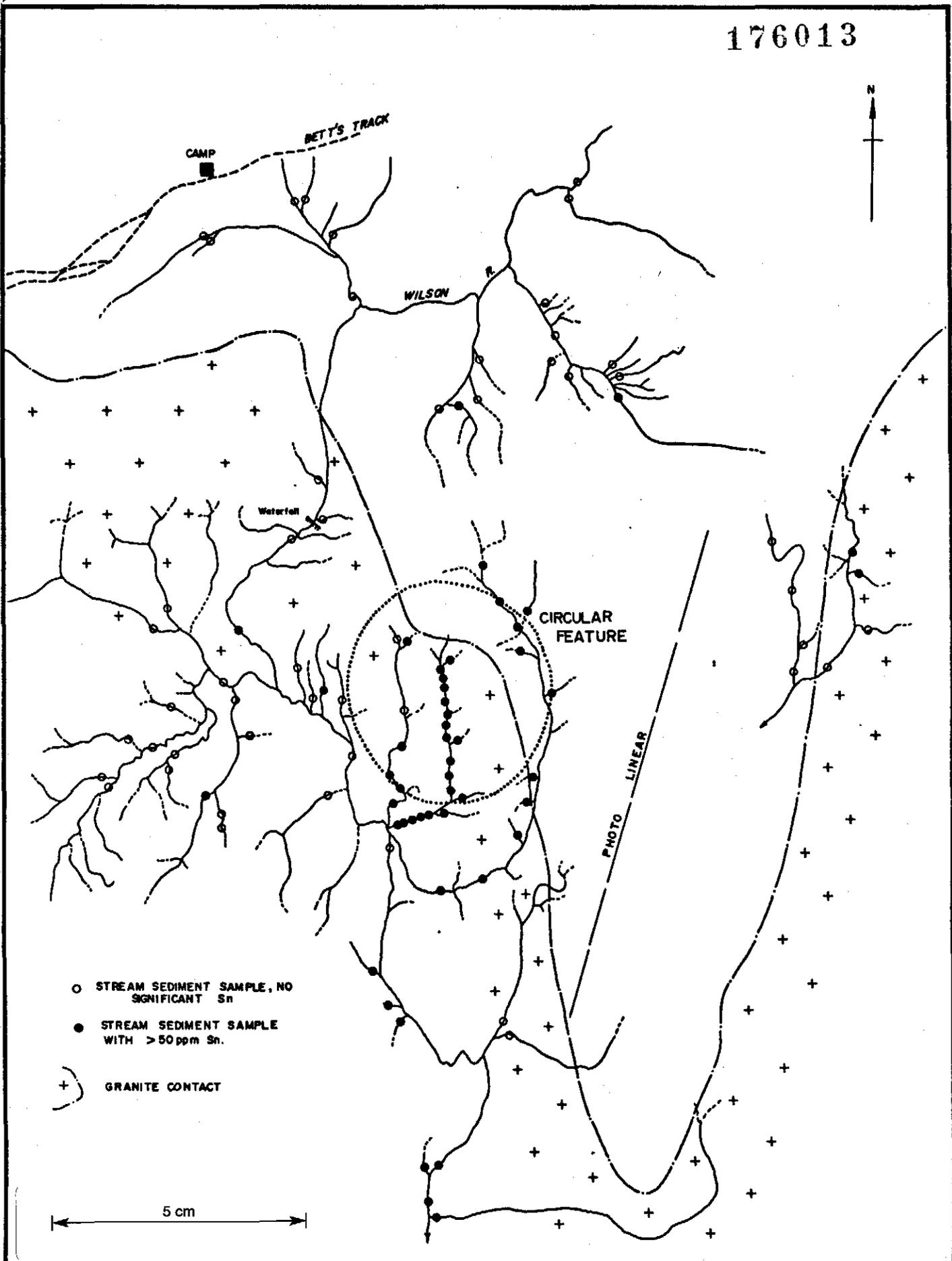
Geology

The topographic expression of the circular air-photo anomaly is not controlled by a geological boundary. The circular feature is a distinct topographical high transgressive to the contact between the Meredith Granite and Cambrian altered basic volcanics and serpentinites (Plate MER 17).

Within the circular feature, marginal granite phases show great variations, predominantly related to the abundance of phenocrysts relative to groundmass. Phases vary from very phenocryst depleted (i.e. aplitic) granites, to phenocryst-rich (almost equigranular) granites. The distribution of these granite types appears irregular.

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- STREAM SEDIMENT SAMPLE, NO SIGNIFICANT Sn
- STREAM SEDIMENT SAMPLE WITH > 50 ppm Sn.
- + GRANITE CONTACT

5 cm

 **Aberfoyle Exploration Pty Ltd**

Drawn: W. E. M.	NORTH WEST TASMANIA MEREDITH E.L. 16 / 78 STREAM SEDIMENT SAMPLING IN VICINITY OF CIRCULAR FEATURE (1980 Programme)	Location code:
Traced: R. J. E.		Date: August, 1980
Checked:		Scale: 1 : 15, 000
Revised by: Date:		Plate No. MER. 17

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The granite in the circular feature area appears to be biotite depleted close to the granite/ultramafic contact, and becomes progressively enriched in biotite (as a groundmass constituent) as the bulk of the intrusion is approached. Further from the contact, the granite becomes less porphyritic and coarser grained.

The Cambrian mafic and ultramafic rocks intruded by the granite consist predominantly of basic tuffs and lavas(?), and serpentinites.

The basic volcanic rocks are extremely altered, appearing as pale-dark grey-green chloritic rocks, occasionally bedded, and containing dark patches interpreted as ex-mafic phenocrysts and common disseminated crystalline ilmenite? (chromite?). In places weathered surfaces reveal the presence of large "clasts" within apparent bedded tuffs.

The serpentinites are dark green-black rocks, which are commonly very magnetite-rich and occasionally silicified.

High Sn geochemistry in rock chip samples (maximum 800 ppm) has been recorded from the ridge of silicified, magnetite-rich ultramafics east of the circular feature.

Geochemistry

Reconnaissance stream sediment sampling was undertaken to improve the coverage of drainage from the circular air-photo feature. Results show consistently anomalous Sn stream sediment values in X creeks draining from both the circular feature and a ridge immediately to the east. High Zn values were recorded where

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Cambrian ultramafic rocks were the stream sediment source (Plate MER 17).

Base of slope soil samples were taken as follow-up of 1979-80 stream anomalies, and one of the creeks sampled, draining off the ridge to the east of the circular feature, returned anomalous Sn values.

Geophysics

Ground proton magnetometer surveys over all available access indicate:-

- (i) The granite underlying the circular feature is magnetically "noisy", and stands out from the bulk of the Meredith Granite.
- (ii) There is an approximate linear magnetic anomaly (due to surficial magnetite) on the ridge east of the circular feature.

Magnetic profiles are appended (refer Joyce 1980a).

UPPER CASTRAY RIVER AREA

Geology

The Upper Castray River area is underlain principally by granite, with the northern contact between granite and Cambrian ultramafics exposed in places. The bedrock is predominantly coarse grained equigranular biotite granite, with more porphyritic variants occurring near granite margins.

In the vicinity of the Mt. Stewart Mine (an Ag, Pb, Zn fissure lode in sheared ultramafics) occasionally weakly greisenised granite dykes extend up to 500 m into the ultramafics.

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Marginal granite phases in the Mt. Stewart area show very great compositional and textural variations. Aplitic and pegmatitic phases have been noted, along with foliated cordierite-rich granites and magnetite-bearing intrusives.

The ultramafic rocks in the area are predominantly dark green serpentinites, with occasional peridotites. Large areas of lateritic, iron oxide-rich concretionary material occurs in the region (within the ultramafics).

Within the granite, narrow joint controlled greisen veins occur, the larger and more accessible of which have been prospected, presumably for tin. Sulphide-rich (galena, sphalerite) quartz veins have also been observed. Quartz tourmaline veins are very common.

Geochemistry

As follow-up to consistently high Sn and W stream geochemistry in the Upper Castray River region, a blanket stream sediment sampling programme was initiated. Stream anomalies in small creeks were followed-up with base of slope soil sampling, but in most cases, anomalous drainage had to be traced to a more definitive source before soil sampling was applicable.

Within the granite, anomalous Sn drainage is probably due primarily to narrow joint controlled greisen veins, as the drainage pattern is also largely controlled by the dominant joint directions of the granite.

Anomalous Sn and Zn drainage commonly occurs across the granite/ultramafic contact. Where base of slope soil sampling has been used

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to follow-up this anomalous drainage, encouraging soil sample results have been returned, (refer Joyce 1980a).

CONTACT CREEK-SHEELITE CREEK AREA

Geology

In the Contact Creek/Scheelite Creek area, Cambrian volcanolithic sediments occur in contact with the Meredith Granite. The sediment sequence, despite generally poor geochemical results, is considered very prospective because of lithological similarities with rocks of the Cambrian Crimson Creek Formation at Renison and Mt. Lindsay.

The sediments in the area are a monotonous sequence of massive purple, brown, grey and greenish volcanolithic sandstones and coarse siltstones, purple and pale and dark grey laminated cherty siltstones, often with oriented clasts (pebbles), black, brown, purple and grey shales and rare conglomeratic tuffaceous sediments and cherts.

The sediments on the whole, appear to be derived from a basic-intermediate volcanic source (mainly lavas). Sedimentary features are consistent with deposition in a sub-aqueous environment as a result of the action of turbidity currents. Intervals between turbidity currents are indicated by the presence of shales, (normal pelagic sedimentation?) and chemical sediments (cherts and carbonates?). Much of the sequence could be tuffaceous. Any petrological distinctions between tuffs and immature volcanolithic sediments have been obscured by alteration.

The presence of considerable thicknesses of downward facing sediment indicates that the sequence has possibly undergone at least two deformations. The apparent absence of cleavage parallel to bedding

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could indicate that the earlier of these deformational episodes did not involve cleavage formation and may be related to the Cambrian Jukesian Uplift (a tilting orogeny).

The sediments show the effects of metamorphism and metasomatism, probably both contact related.

Within approximately 1 km of the granite contact, sandstones and siltstones have been converted to very hard, dark hornfelsic rocks rich in biotite, (where composition allows). Closer to the granite, more pelitic sediments contain common large cordierite porphyroblasts.

Metasomatic alteration appears to have involved the addition of vast amounts of Ca and Mg to the rocks. The most common metasomatic assemblage includes;

. tremolite, diopside, phlogopite, prehnite, pyrrhotite (pyrite).

Tremolite is the most common alteration product, but selective layers or beds are replaced by diopside or phlogopite.

Veinlets of tremolite (+ pyrite, quartz) commonly have alteration haloes of a few centimetres (tremolite, diopside-pyrrhotite) in largely unaltered rocks and there is an obvious field relationship between veining and extent of alteration.

Apparently concordant sills of doleritic material occur throughout the Cambrian sequence. Closer to the granite, the volume of doleritic material appears to increase markedly.

Geochemistry

Within this general area, two centres of high geochemistry emerged from the 1978 - 79 programme. A small tributary of the Whyte River, in the vicinity of a series of small meanders, gave highly anomalous Sn values in both stream sediment and base of slope soil samples. Further sampling indicates that the early results may be due to contamination from the Whyte River. However, a magnetic anomaly does coincide with the geochemically anomalous area and further work is anticipated.

Scheelite in panned concentrates was reported by ANZECCO (1976), in a large creek about 1 km west of Mt. Stewart (Scheelite Creek). Due to problems of navigation in thick vegetation, this creek was not sampled by Aberfoyle until the 1979-80 season, when contractors were hired to take heavy concentrate samples, in an attempt to verify the ANZECCO results. Visible scheelite was observed in these samples. Conventional stream sediment coverage and base of slope soil sampling were also undertaken.

In general, stream sediment samples taken in the 1978-79 season gave poor response for Sn and W, so follow-up was not a large part of the 1980 programme.

All available access tracks were soil samples at 25 m intervals. The background of Sn and W in the Cambrian sediment sequence was very low (<10 ppm) and few encouraging results were returned, (refer Joyce 1980a).

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5. 1980 DIGHEM SURVEY

In late January 1980, a helicopter-borne DIGHEM survey covering 122 line km was flown over two areas of Cambrian exposure on the northern contact zone of the Meredith Granite, including the Bett's Track and Contact Creek-Scheelite Creek anomalies (Plate MER 24). Full details of this survey are given in Joyce (1980b).

Sufficient time was left during the summer field season to follow-up the following anomalies. Extract from Joyce (1980b):

WHYTE RIVER MEANDER AREA

A weak EM anomaly in the vicinity of a small creek with established Sn anomalies in stream sediment and base of slope soils was followed up with ground EM traverses.

The traverses failed to locate the anomaly, but subsequent ground magnetometer surveys delineated a large (10000 gamma) magnetic anomaly at the base of the creek. The base of the creek appears to be a broad alluvial flat subject to periodic inundation by Whyte River floodwaters and the high geochemistry may be due to contamination. Further ground magnetics and detailed mapping and rock chip sampling are intended.

MT. YOUNGBUCK

A reconnaissance ground EM traverse located the strong DIGHEM conductor in the vicinity of Scheelite Creek.

The anomaly was found to occur within Cambrian sediments over the eastern slopes of a steep sided, heavily timbered peak on the northern end of the Meredith Range, (Mt. Youngbuck). A 5 x 750 m

MEREDITH E.L. 16/78

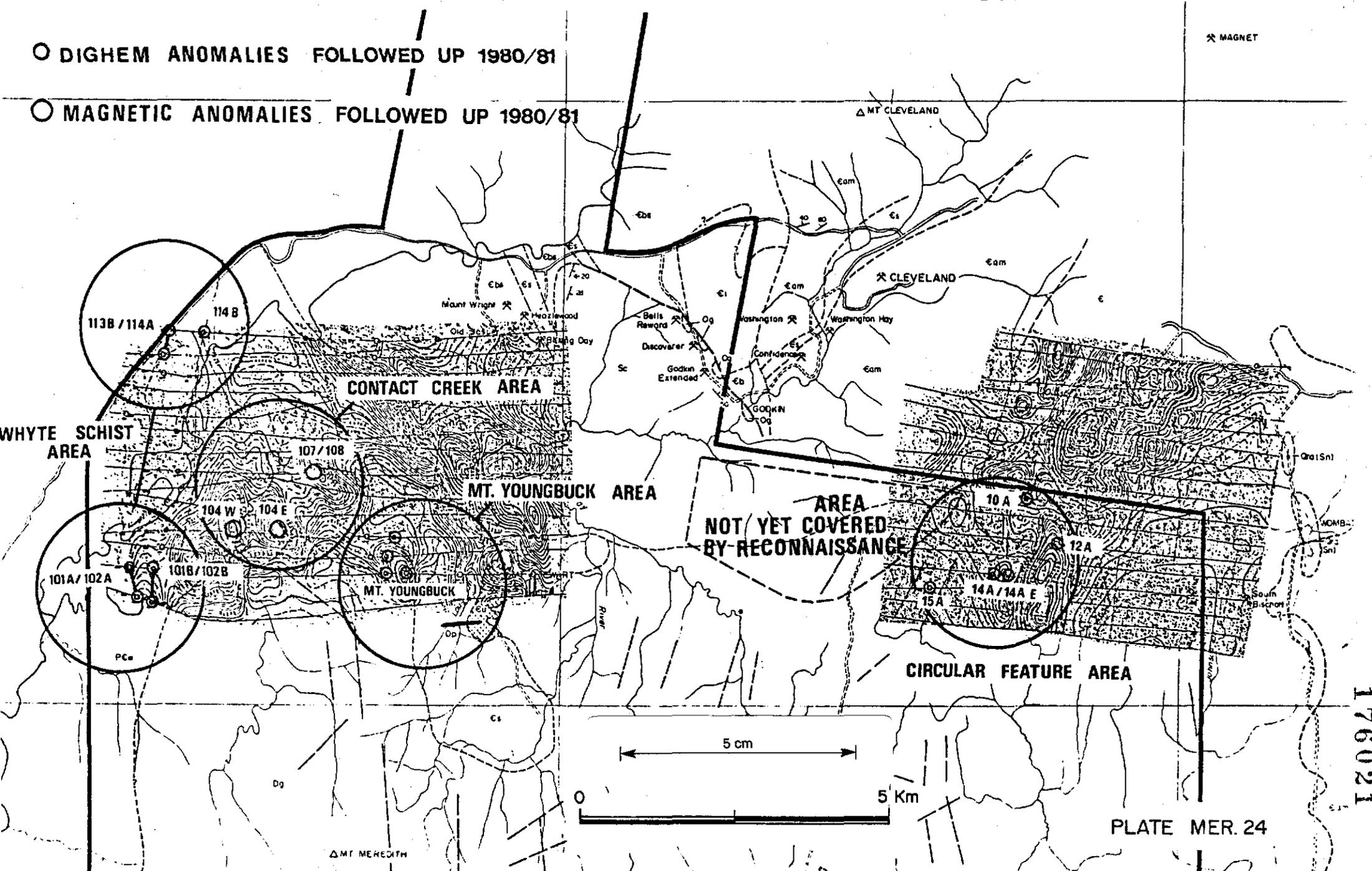
DIGHEM COVERAGE

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○ DIGHEM ANOMALIES FOLLOWED UP 1980/81

○ MAGNETIC ANOMALIES FOLLOWED UP 1980/81

✱ MAGNET



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PLATE MER. 24

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line grid was established and grid geological mapping, 10 m spaced soil sampling and ground magnetics completed.

Geological mapping revealed that the anomaly occurs within a sequence of massive purple and green volcanolithic sandstones (or tuffs?) and interbedded shales and siltstones. Rare black carbonaceous shale was encountered.

A ground EM system (SIROTEM), was used to locate and assess the DIGHEM anomaly.

MT. YOUNGBUCK SIROTEM SURVEY

This survey was implemented to locate and define the sources of DIGHEM anomalies 102D, 103D and 104D, (refer Joyce 1980b).

The results showed the following:

- i Anomalies from lines 30200N to 30000N are regarded as being due to a highly conductive sheet (conducting thickness approximately 100 mhos.), the asymmetry of the response suggesting a westerly dip. A strike length of approximately 200 metres is indicated.

DIGHEM anomalies 103D and 104D were considered to correspond with the SIROTEM anomaly above, whilst DIGHEM anomalies 103C and 104C are thought to be part of the same conductive sheet. The total airborne EM anomaly (DIGHEM) shows a broad resistivity low on the resistivity map, suggesting that the conductive sheet extends from the top of Mt. Youngbuck to bottom.

- ii Line 29900N has no significant anomalies.

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iii The SIROTEM response on Line 29800N could be explained by the presence of a low resistivity rock unit (approximately 5 ohm metres), which the EM system has "seen" as being approximately flat lying, perhaps due to its "wrapping" around the top of the mountain. There is no apparent connection with the northern anomalies. This response probably corresponds to DIGHEM anomaly 102D.

The absence of encouraging geochemical response in the vicinity of these EM anomalies suggests that carbonaceous black shales may be the anomaly source. However, ground magnetic anomalies appear to coincide with the SIROTEM anomalies and further follow-up ground magnetics are planned.

SCHEELITE CREEK

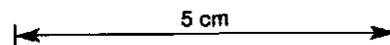
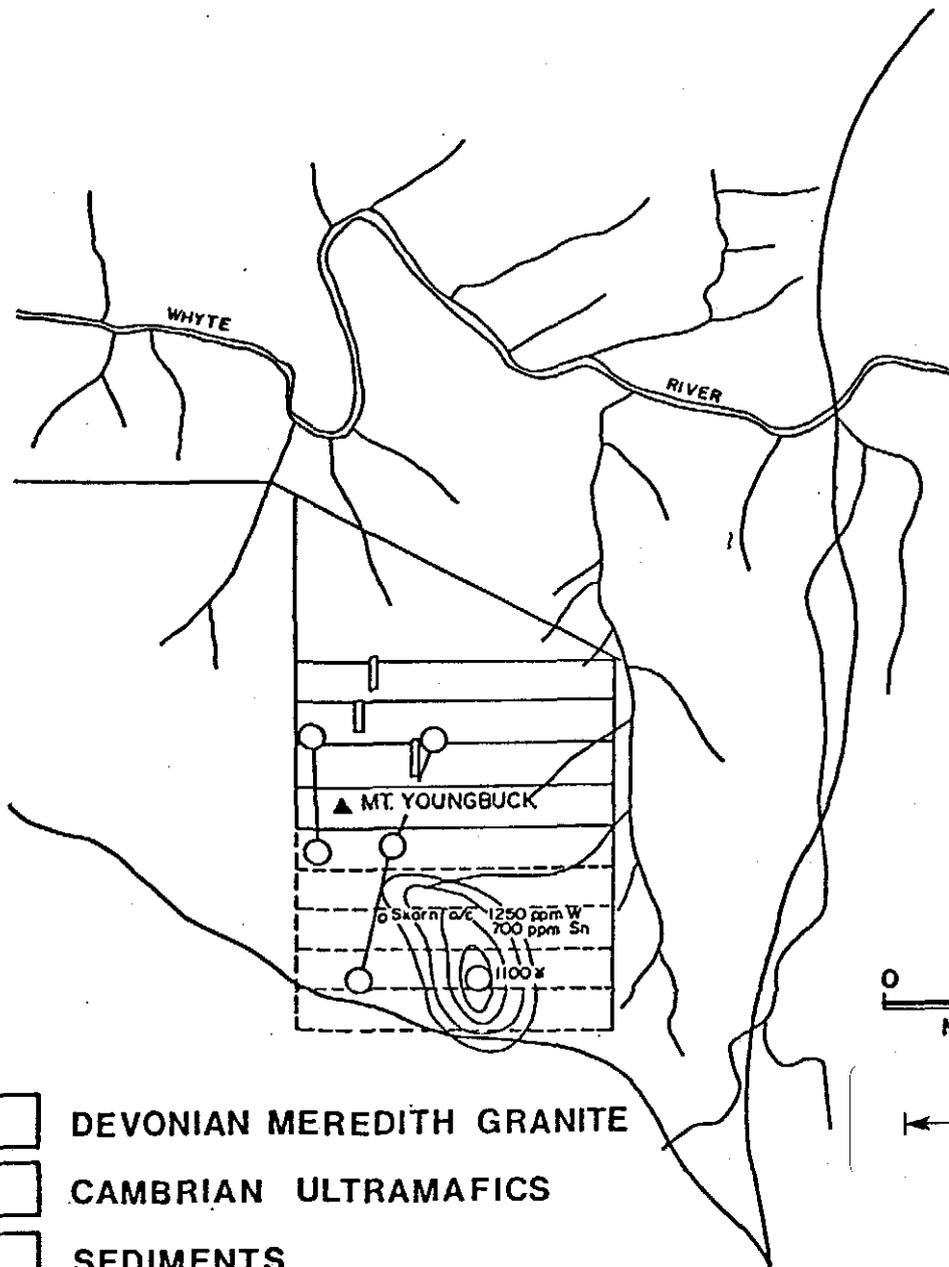
A magnetite-hastingsite-scheelite skarn 0.5 km south of Mt. Youngbuck is the probable source of scheelite observed in panned concentrates in Scheelite Creek. (Plate MER 23).

The skarn outcrops on a saddle, 200 - 300 m from the granite contact, and in close proximity to float evidence of a minor aplitic intrusion. The skarn contains approximately 50% crudely banded magnetite and 50% greenish hastingsite. Trace scheelite, flourite and cassiterite are present.

Preliminary samples give assays of Sn 700 ppm, W 1250 ppm.

Base of slope soil sampling was performed in a tributary of Scheelite Creek which drains the saddle on which the skarn outcrops. The results show clear anomalies in Sn and W, (maximum Sn 80, W 85

MEREDITH E.L. 16/78 Mt Youngbuck Grid Area



-  DEVONIAN MEREDITH GRANITE
-  CAMBRIAN ULTRAMAFICS
-  SEDIMENTS

-  PRESENT GRID
-  PROPOSED GRID EXT.
-  ANOM. Sn GEOCHEM.

-  SIROTEM ANOMS.
-  DIGHEM ANOMS.
-  MAG. CONTOURS

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ppm), which are far above background levels (Sn <4 ppm, W <10 ppm).
(Plate MER 21).

The skarn appears to be the source of a coincident EM and magnetic anomaly detected by DIGHEM. DIGHEM magnetic data shows a possible strike length of 100 - 200 m.

Stream sediment sampling of Scheelite Creek was performed as a check of the results of heavy concentrate sampling, which detected anomalous W, as scheelite. The results of the conventional sampling were disappointing, with Sn and W values being uniformly low.

BETT'S TRACK AREA

After initial investigations of the circular air photograph anomaly, high Sn geochemistry in rock chip samples from a ridge of silicified, magnetite-rich ultramafic rocks 1 km east of the Circular Feature, prompted follow-up in this area.

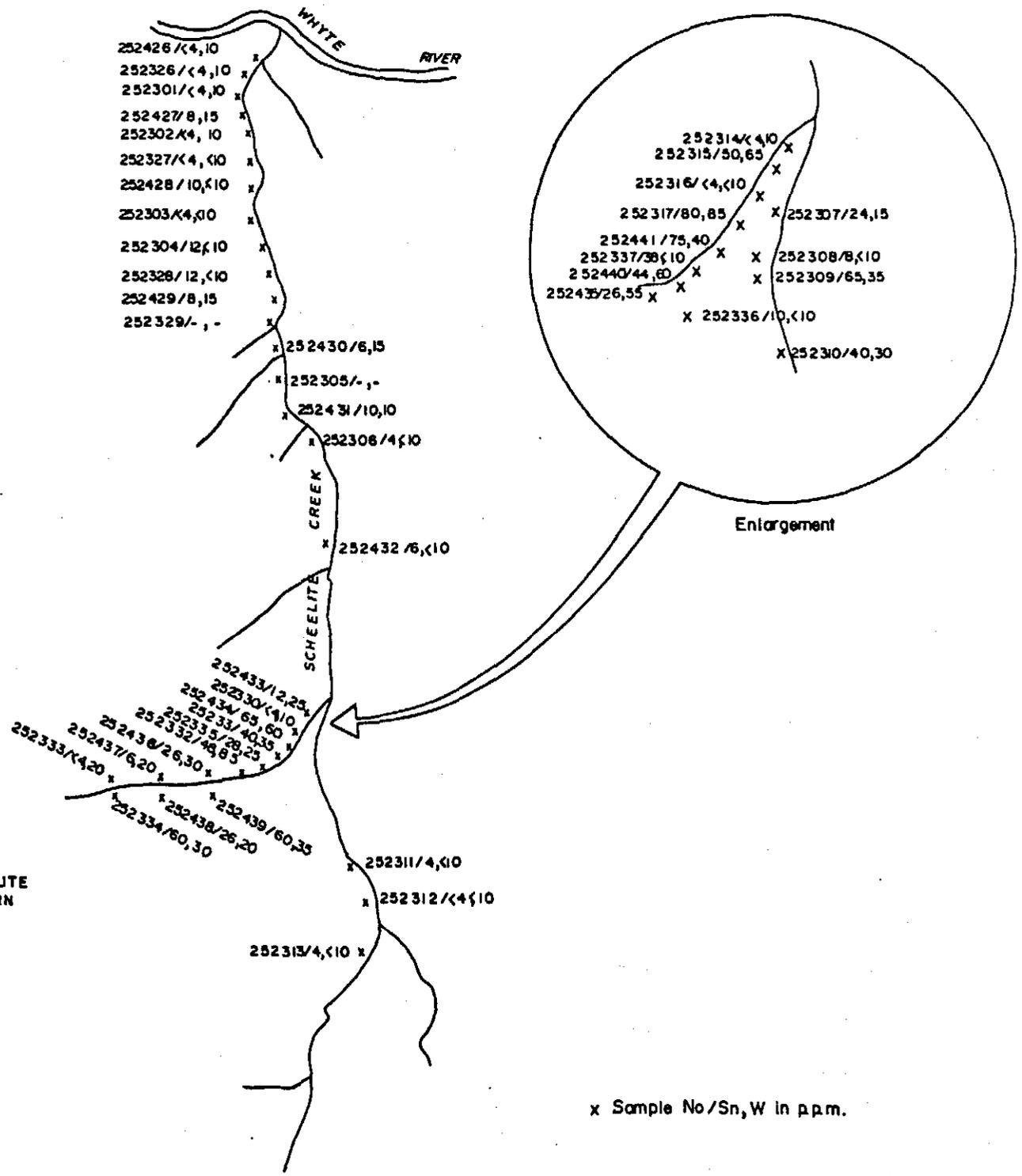
A grid of five 200 metre spaced crosslines, each 400 metres long, extending and incorporating part of the Circular Feature grid, was established. Soil sampling and ground magnetics were implemented at 20 m spacings, and random rock chip sampling performed.

Grid magnetics show an approximately linear anomaly due mainly to outcropping disseminated magnetite. This anomaly appears to coincide with an air photo lineament.

Further rock chip sampling resulted in several more encouraging results (up to 2100 ppm Sn), however grid soil sampling proved a disappointing tool as even samples taken in the immediate vicinity

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Drawn: R.M.J	NORTH WEST TASMANIA MEREDITH E.L.16/78 SCHEELITE CREEK BASE OF SLOPE SOIL SAMPLING	Location code:
Traced: J.L.R.		Date: Nov. 1980
Checked:		Scale: 1:10,000
Revised by: Date:		Pl. No. MER 21

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of anomalous rock chip samples were barely above background (maximum 24 ppm).

6. 1980/81 PROGRAMME

Most of the 1980/81 summer field season was spent in ground evaluation of EM anomalies revealed during the January 1980 DIGHEM survey. Anomalies were explored by a combination of gridding, soil sampling, ground magnetics and EM, detailed mapping and rock chip sampling. Four groups of anomalies were investigated, details of which are found in Joyce (1981). Summary results are as follows:

MT. YOUNGBUCK

The skarn horizon has an interpreted surface width of 10 - 12 metres and a strike length of around 500 metres. The zone is terminated in the south by the Meredith Granite and truncated to the north by a possible fault. Ground magnetic traverses indicate that the skarn horizon is cut by doleritic material. Diamond drilling was proposed for 1982.

CONTACT CREEK AREA

Magnetic anomalies in the Cambrian sediments in this area near the contact with the Meredith Granite are due to disseminated magnetite and pyrrhotite in metasomatised siltstones and sandstones within the contact metamorphic aureole of the granite. No further work was proposed.

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WHYTE SCHIST ZONE

EM anomalies in the Precambrian units are apparently due to carbonaceous black shale horizons. No further follow-up was proposed.

CIRCULAR FEATURE

Apparent EM anomalies detected by DIGHEM are spurious and due in most cases to the high magnetite content in the ultramafic rocks. No significant geochemical anomalies were revealed. Further reconnaissance work in the area along strike from the Cleveland Mine sequence was proposed.

7. 1981/82 SUMMER PROGRAMME

Field work during the 1981/82 summer season focussed on two areas, the Upper Castray River and Mt. Youngbuck (Plate MER 46). Details of these activities are presented in Joyce (1982) and Sise (1982):

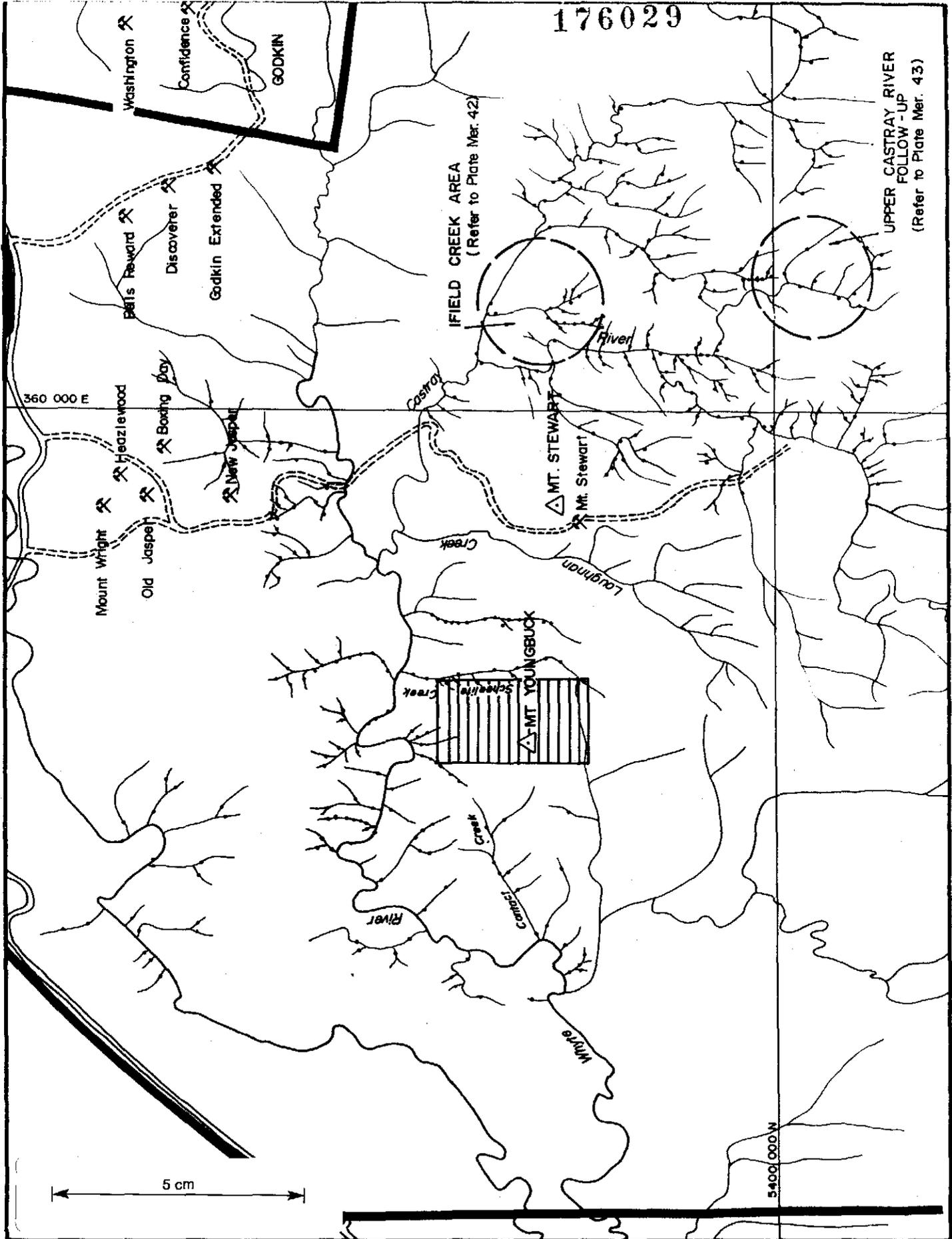
UPPER CASTRAY RIVER AREA

In the Upper Castray River area two zones of anomalous tin stream geochemistry were followed up by hand auger soil sampling. At Ifield Creek (Plate MER 42), 54 samples were collected on 5 lines, resulting in an area of greater than 200 x 80 metres containing anomalous tin and zinc (up to 1250 ppm Sn, 5100 ppm Zn) soil geochemistry being outlined. The anomalous zone was open to the north, south and west.

At a second anomalous stream sample locality in the Upper Castray River (Plate MER 43), base of slope soil sampling failed to detect coherent geochemically anomalous zones, and suggested that the

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UPPER CASTRAY RIVER
 FOLLOW - UP
 (Refer to Plate Mer. 43)

IFIELD CREEK AREA
 (Refer to Plate Mer. 42)



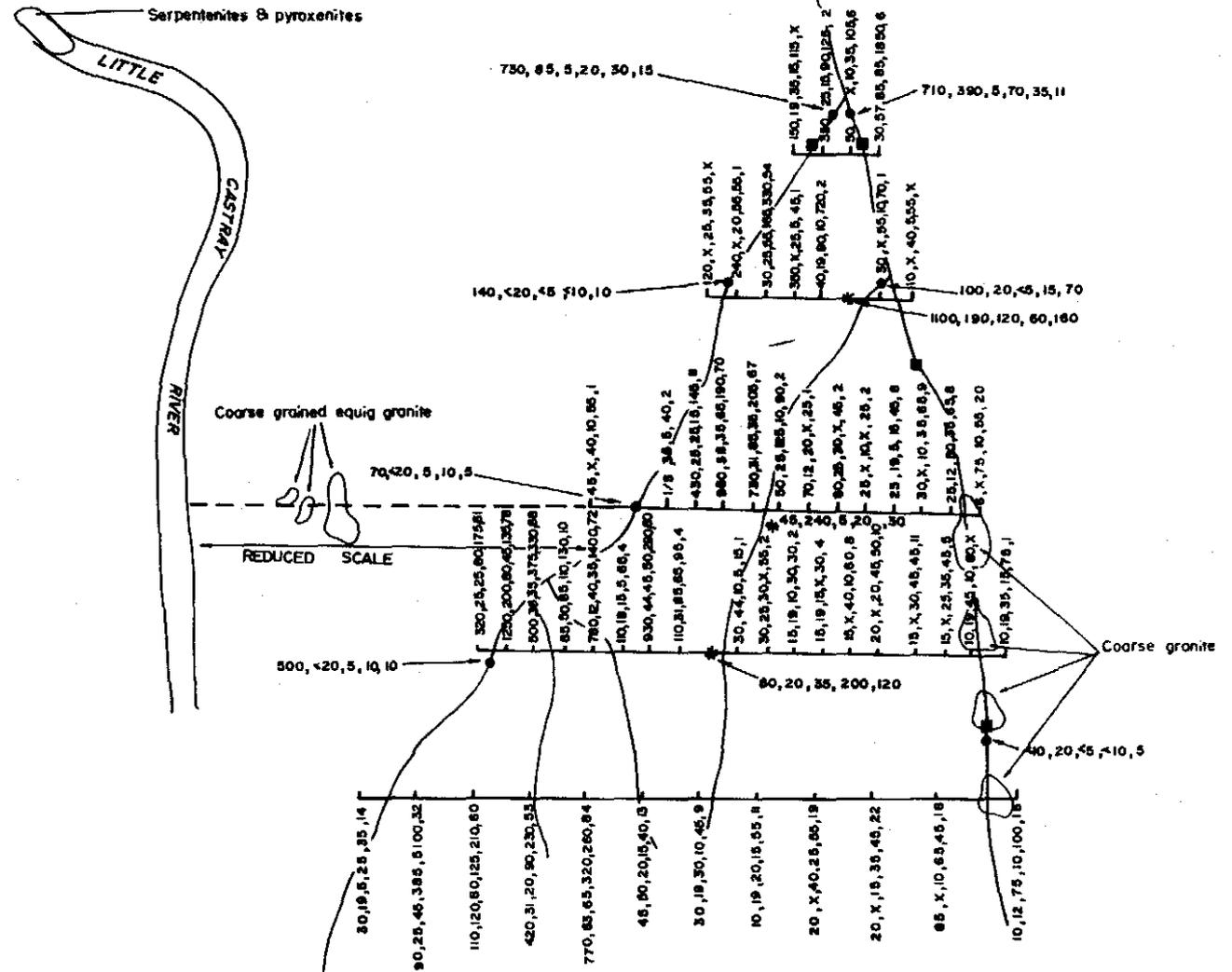
Aberfoyle Exploration Pty Ltd

Drawn:	NORTH WEST TASMANIA MEREDITH E.L. 16/78 STREAM SAMPLING SUMMARY PLAN SHOWING IFIELD CK. & UPPER CASTRAY RIVER AREAS	Location code:
Traced: J.L.R.		Date: April, 1982
Checked:		Scale: 1: 50,000
Revised by: Date:		Plate No MER.46

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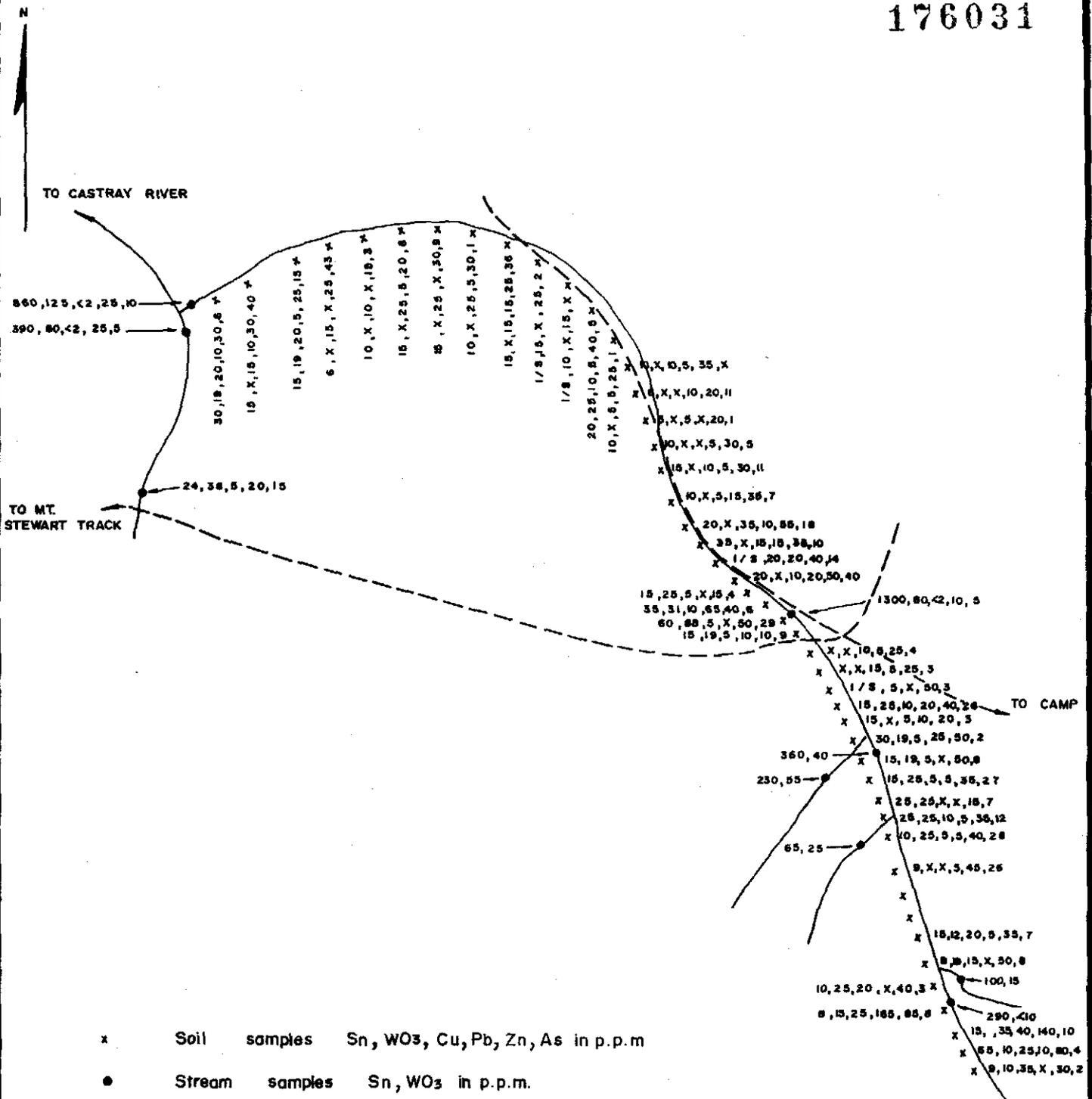
TO CASTRAY RIVER



- Aberfoyle soil sample (1981-82) prefix 260 260707- 260760
 - Aberfoyle stream sample (1978-79, 1979-80)
 - ANZECCO stream sample, Anom. Sn detected
 - * Aberfoyle base of slope sample (1979-80)
- Sn, WO₃, Cu, Pb, Zn, As in p.p.m.

Aberfoyle Exploration Pty Ltd

<p>Geology:</p> <p>Drawn: R. M. J.</p> <p>Traced: J. L. R.</p> <p>Checked:</p> <p>Revised by: Date:</p>	<p>NORTH WEST TASMANIA</p> <p>MEREDITH E.L. 16/78</p> <p>IFIELD CREEK AREA</p> <p>SUMMARY GEOCHEMISTRY</p>	<p>Location code:</p> <p>Date: January, 1982</p> <p>Scale: 1: 2500 approx.</p> <p>Plate No MER 42</p>
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Aberfoyle Exploration Pty Ltd

Geology:	NORTH WEST TASMANIA MEREDITH E.L. 16/78 UPPER CASTRAY RIVER AREA SUMMARY GEOCHEMISTRY	Location code:
Drawn: R.M.J		Date: January, 1982
Traced: J.L.R.		Scale: 1: 2500 approx.
Checked:		Plate No MER. 43
Revised by: Date:		

stream anomalies may be due to isolated greisen veining within the granite.

MT. YOUNGBUCK

The main activities for the year were centred on Mt. Youngbuck where a scheelite-bearing magnetite-pyrrhotite-hastingsite skarn zone had previously be identified. The gridded area was extended to the north, geologically mapped, geochemically sampled and read with ground magnetics and Max-Min ground EM. No significant anomalies were located on the new grid.

Two diamond drill holes for a total of 229.4 metres were drilled to test the Mt. Youngbuck skarn at depth. The first hole, MY1 (29720N, 29490E - Joyce, 1982), intersected a sequence of calc-silicate hornfels and skarn from 35.92 to 87.00 metres. Trace amounts of coarse scheelite occurred throughout this intersection. Tungsten values were patchy (max. 6800 ppm over 0.75 m, from 78.95 m to 79.70 m) and reflect the irregular distribution of the scheelite. Tin values were generally low (max. 900 ppm). The second hole, MY 2 (29640N, 29450E - Sise, 1982), intersected the same calc-silicate skarn sequence from 32.50 m to 74.12 m. The peak tungsten response was 0.4% over two metres between 50.5 m and 52.5 m. Tin values were universally low.

8. 1983 PROGRAMME

During 1983 the Meredith Exploration Licence was reduced to 125 square kilometres to comply with the maximum permitted area for a five year old licence under revised conditions implemented by the Department of Mines (Plate MER 11A).

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Field activities (Sise, 1983) involved target definition at Ifield Creek in the Upper Castray River area and regional reconnaissance in a potentially prospective region south of Cleveland. Further drilling at Mt. Youngbuck was deferred.

At Ifield Creek, anomalous tin values were found to be associated with a skarn, formed by metasomatic replacement of carbonated ultramafics or carbonate sediments. Channel samples were collected from trenches and analysed. Results confirmed the association of high tin, lead and zinc values with a linear, manganiferous magnetite-pyroxene skarn zone within the granite. Trench sampling gave an average of 3715 ppm tin over 10 metres across the width of the skarn. Picked skarn samples returned maximum values of 305 ppm Cu, 810 ppm Pb, 580 ppm Zn and 6550 ppm Sn. Assays for W, Ag, Mo, As, U, and Au recorded background values only.

In the West Bett's Track area, South of Cleveland (Plates MER 52 & 53), the theory that prospective stratigraphy may exist in the region was confirmed by the location of sulphide-bearing lithologies and anomalous geochemistry. Reconnaissance geological mapping, stream sediment and rock chip sampling was undertaken in this previously unmapped and difficult to access area. Three metasomatised and variably carbonated sedimentary rock types were collected which are likely derivatives of the Gorden Limestone. One such sample, a metasomatised dolostone, contained pyrrhotite and pyrite and assayed 325 ppm zinc.

176035

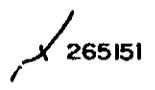
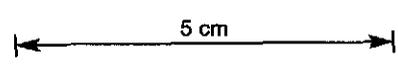
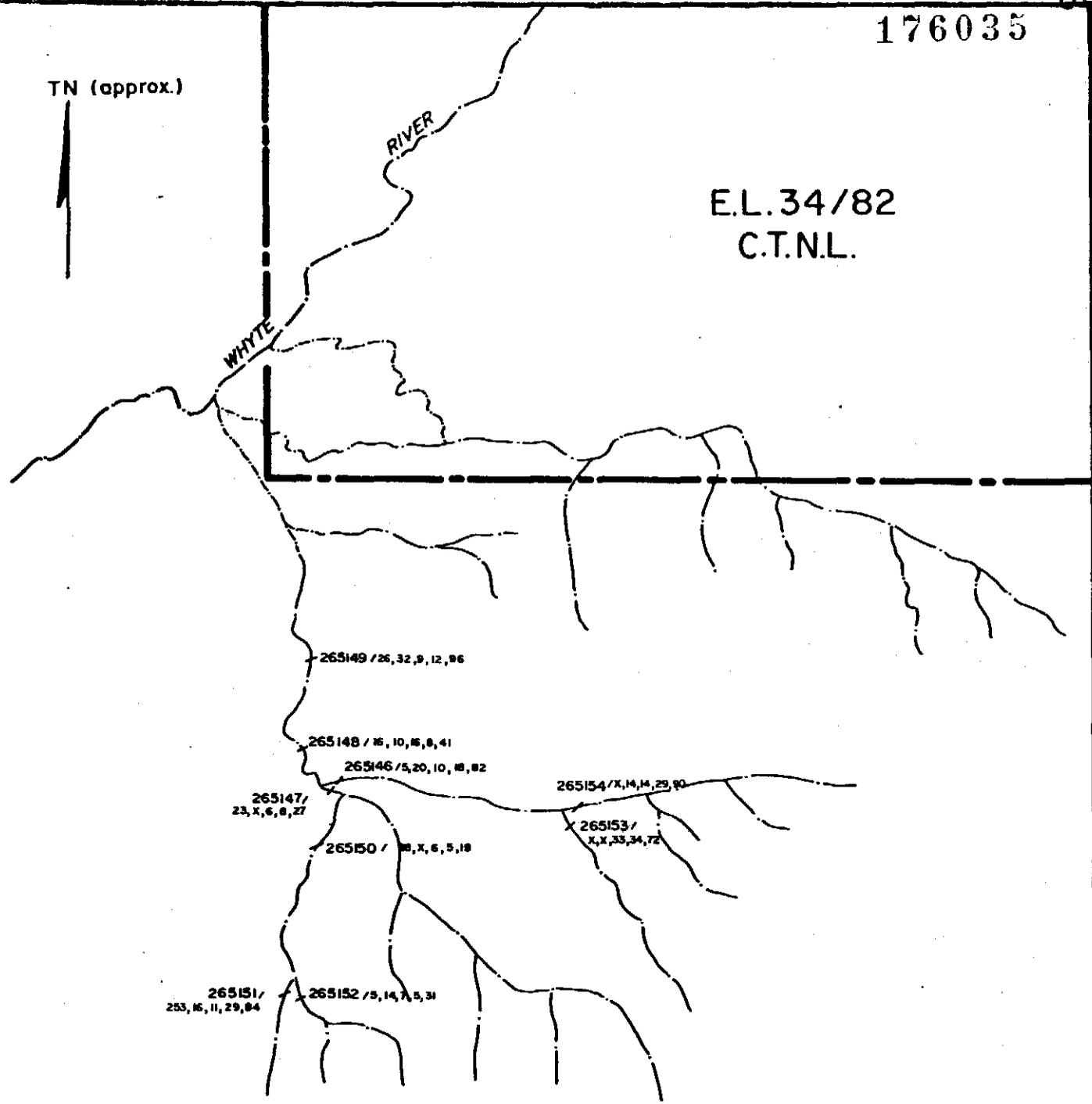
TN (approx.)



RIVER

E.L. 34/82
C.T.N.L.

WHYTE



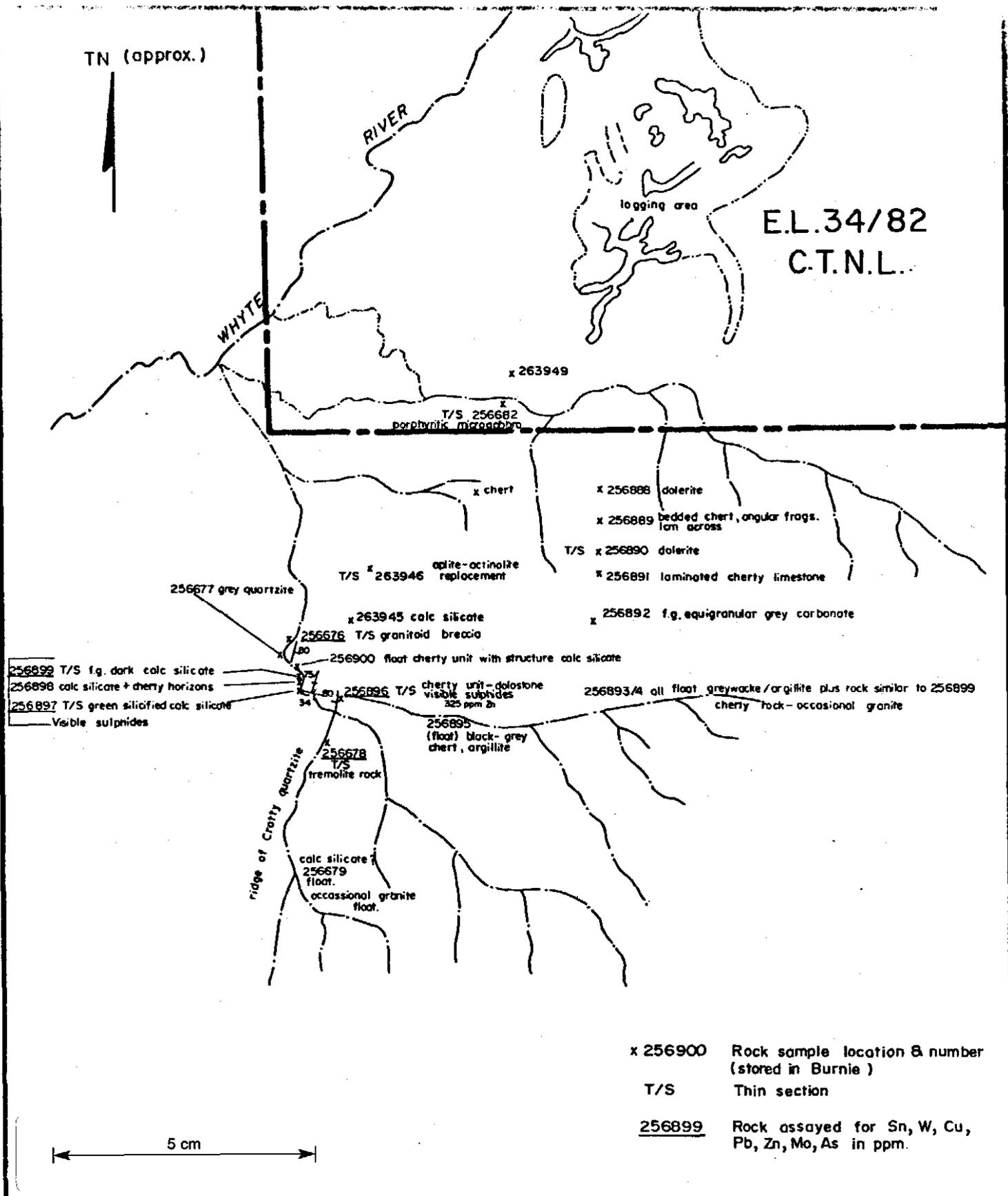
Stream sediment sample location & number
(Sn, W, Cu, Pb, Zn in ppm)

Aberfoyle Exploration Pty Ltd

Geology:	NORTH WEST TASMANIA MEREDITH E.L. 16/78 WEST BETT'S TRACK Stream Sediment Sample locations & results	Location code: K55/3
Drawn: D.J.J.		Date: April, 1983
Traced: R.J.E.		Scale: 1: 15,000
Checked:		Plate No
Revised by: Date:		MER. 52

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176036



Aberfoyle Exploration Pty Ltd

Geology:	D.J.J.
Drawn:	D.J.J.
Traced:	R.J.E.
Checked:	
Revised by:	Date:

NORTH WEST TASMANIA
MEREDITH E.L. 16/78
 WEST BETT'S TRACK
 Reconnaissance Geology - Rock sample locations

Location code:	K55/3
Date:	April, 1983
Scale:	1:15,000
Plate No.	MER. 53

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9. 1984 PROGRAMME

Work proposed for the Meredith licence during 1984 included completion of the DIGHEM coverage over the northern contact region of the Meredith Granite, south of Cleveland, and over the prospective Palaeozoic sediments known to contain limestone sequences. The West Bett's Track area, centred on a prominent aeromagnetic anomaly, would be accessed, gridded and evaluated using basic geology, geophysical and geochemical target definition techniques. In addition, the Mt. Youngbuck area and silver-lead-zinc occurrences on the licence would be examined as possible future drill targets.

With the discovery of a major base metals resource at Hellyer during 1984 and the necessary re-allocation of staff and funds, none of the proposed work for the Meredith licence was completed by October 20, 1984, when the licence came up for renewal. Similarly, no annual report was submitted for 1984.

The Department of Mines granted a six month extension to 20 April, 1985, requested by Aberfoyle, to enable reconnaissance for commodities other than tin to be conducted on the understanding that the licence would be relinquished if these activities proved unrewarding. The Department of Mines also insisted that after this period a comprehensive work programme would be required to support further renewals.

10. 1985 PROGRAMME

Work during the six months to April was undertaken in the following areas.

GEOPHYSICAL REVIEW

A review of the DIGHEM and aeromagnetic data for EL 16/78 was conducted by Geophysical Exploration Consultants Pty Ltd. The full report by Guido Staltari is appended (Appendix I). This study outlined several tin-tungsten targets on the property for further work. However, due to Aberfoyle's unfavourable perception of the tin-tungsten market for the foreseeable future, these targets were not considered for immediate work.

PLATINOIDS AND CHROMITE

An extensive literature search into these commodities and records of occurrences on the Meredith licence was undertaken. It was determined that some potential did exist within the Heazlewood Ultramafic Complex, but that exploration techniques were largely untested. Attempts to attract a joint venture partner with specialised skills in alluvial exploration were unsuccessful.

BASE METALS

The silver-lead-zinc potential of the Mt. Stewart - Mt. Jasper areas was reviewed by assessing Aberfoyle's stream sediment survey data and studying old mine records. Base metal vein mineralisation is known in the ultramafics from the Mt. Stewart region and in fault bounded limestone along the Godkin trend. These occurrences appear to have limited potential for further mineralisation.

Orientation Max-Min EM was conducted over the Mt. Stewart workings. The field sheets from this survey are appended (Appendix II).

11. CONCLUSIONS

The Meredith licence was acquired in 1978 primarily as a tin-tungsten property. Successive programmes using a variety of modern exploration techniques lead to diamond drilling of a previously unknown skarn horizon on Mt. Youngbuck. Results were disappointing and discouraged further exploration for this style of contact mineralisation.

Following licence reduction in 1983, efforts focussed away from tin to the evaluation of the potential for other commodities. Old silver-lead-zinc workings were researched, but found to offer limited opportunities for further significant mineralisation. Potential still exists on the property for tin targets and the more conceptual hard-rock chromite and platinoids, likely to be associated with the Heazlewood Ultramafic Complex. None of these targets are currently considered attractive.

It is recommended that the property be relinquished.

12. EXPENDITURE

The Statement of Expenditure (Appendix III) for Exploration Licence 16/78 pertains to the period commencing October 20, 1984 and ending April 29, 1985.

Since the granting of the licence, annual expenditure has been as follows:

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1979	-	\$ 86,944
1980	-	\$120,000
1981	-	\$ 95,524
1982	-	\$135,248
1983	-	\$ 30,633
1984	-	\$ 4,000
1985	-	\$ 10,765
		\$ 11,715

The average expenditure per square kilometer per year for the full term of the Exploration Licence has been \$280.

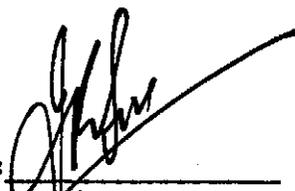
13. REFERENCES

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- Joyce R.M. (1982) Meredith Granite Project. Progress Report for the six months ending April 20, 1982.
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041
Sise, J.R. (1983)

Annual Report Exploration Licence
16/78, Meredith. For year ended
October 20, 1983.

Compiled & Issued by:



J R Sise

Assistant Manager

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APPENDIX I

A Review of Geophysical Data from

EL 16/78, Meredith, Tasmania

by

Geophysical Exploration Consultants Pty Ltd

A REVIEW OF GEOPHYSICAL DATA FROM
E.L. 16/78, MEREDITH, TASMANIA

FOR

ABERFOYLE EXPLORATION PTY LTD

BY

GEOPHYSICAL EXPLORATION CONSULTANTS PTY LTD

4TH MARCH 1985.

GUIDO STALTARI

CONTENTS

1. INTRODUCTION
2. GENERAL GEOLOGICAL SETTING.
3. DISCUSSION
 - 3.1 REGIONAL MAGNETICS
 - 3.2 THE NORTHERN MARGIN OF THE MEREDITH GRANITE.
4. CONCLUSIONS AND RECOMMENDATIONS.

LIST OF FIGURES.

1. GEOLOGICAL SUMMARY MAP.
2. REGIONAL AEROMAGNETICS AND POSSIBLE EXPLORATION TARGETS.
3. DIGHEM SURVEY - ENHANCED MAGNETICS WITH PROSPECTIVE ZONES.
4. DIGHEM SURVEY - RESISTIVITY WITH PROSPECTIVE ALTERATION ZONES.

1. INTRODUCTION

This report summarizes the findings of a review of geophysical data from the northern part of Meredith Licence E.L. 16/78, with particular reference to the Mt Youngbuck - Mt Stewart area.

The area is covered by the Tasmanian Mines Department West coast aeromagnetic survey, an Aberfoyle Dighem survey (in the Contact Creek area), and assorted local ground magnetic and electromagnetic surveys.

The aim of the review has been to assess whether any significant targets are likely to remain in the area, despite an appreciable amount of exploration work over the past four to five years. These targets include carbonate-replacement, greissen, and breccia style tin/tungsten occurrences within Cambrian and/or Ordovician carbonate bearing sequences; volcanogenic lead-zinc mineralization, and ultramafic-hosted chromite deposits.

In view of the above, the review has taken into account the generalized features of the Cleveland and Mt Bischoff deposits, and the general style of skarn associations.

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2. GENERAL GEOLOGICAL SETTING (after Aberfoyle).

The licence includes most of the outcrop extent of the Meredith Granite and its northern contacts. The Meredith Granite is an Upper Devonian (K/AR;350my, Rb/Sr 353 ± 7 my) intrusive, closely related in both age and composition to the Housetop, Pieman, Granite Tor and Heemskirk granites in Western Tasmania.

Work by Aberfoyle has been concentrated on the northern margins of the intrusive, where porphyritic granite variants are common. Variations in these prophyritic marginal phases are common, usually involving relative phenocryst abundance and/or the abundance of biotite as a groundmass constituent. Other variations include grain size, and changes in the relative abundance of plagioclase, cordierite and tourmaline.

To the west the granite intrudes quartzites, quartz-muscovite schists, and carbonaceous black shales of the Precambrian Whyte Schist complex.

To the north-east pyroxenites, peridotites, serpentinites, altered basic volcanics and tuffs and undifferentiated igneous rocks of the Cambrian Heazlewood complex and similar mafic-ultramafic ophiolite suites outcrop.

In the north-west sediments of probable Cambrian age appear to correlate with the Crimson Creek formation. In general these sediments appear to be a sequence of turbiditic volcanic sandstones, siltstones and shales with rare conglomerate and chert. Although not yet mapped it is possible that carbonate horizons occur within the sequence.

Ordovician-Silurian sediments are also in contact with the granite to the north, and apparently unconformably overlie the Cambrian sequence. Silurian quartzites constitute the bulk of these younger sediments but stylolitic limestone, perhaps related to the Ordovician Gordon Limestone has been mapped in the Castray River and mineralised limestones occur to the north-east (Godkin).

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3. DISCUSSION

Because of the nature of this review, the regional magnetics have not been interpreted in detail. Nevertheless, several concepts and possible target zones can be outlined.

3.1 REGIONAL MAGNETICS (figure 2)

The regional aeromagnetics in the area are dominated by contrasts between the Heazlewood ultramafic complex, the Cambrian and Precambrian clastics and mafic intrusives/extrusives, and the Meredith granite. There is added complexity due to marginal granite contact alteration which has resulted in hornfelsing and associated generation of magnetite in adjacent sediments.

Sections of the Heazlewood ultramafic complex obviously encompass the Mt Stewart south area, and the Mt Wright area to the north. Whereas the generalized geological map shows Cambrian sediments in between these two blocks, the regional magnetics suggests that the ultramafics are contiguous across the gap, possibly under a thin veneer of cover. One striking feature of the complex is the continuous nature of the

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main dunite which extends south-eastward to within 1 km south-west of the Old Jasper workings. This dunite may be the host of anomalous Cr in geo-chemical samples taken from the area.

Regional faults/fracture zones are evident in the data and several of these pass through or close to known mineral occurrences. A major one passes through the Cleveland and Mt Bischoff deposits, the latter being a hybrid carbonate replacement/porphyry style occurrence with one of its dominant porphyry dyke directions aligning along the fault zone. On the basis of the implication that this fault zone was a primary crustal fracture through which mineralizing solutions were introduced into suitable host rock situations, several interesting high frequency anomalies can be outlined east-north-east of Cleveland. These may represent discrete contact metasomatic/mineralized locations but it is possible, that, in view of their proximity to Cleveland, that they have already been followed up and found unprospective.

It is interesting to note that the main fault zone outlined above passes westward through the Mt Wright/

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Heazlewood mineral occurrences.

Further, albeit weak, evidence for east-west structural control on mineral occurrences in this region relates to the fact that the Mt Youngbuck, Ifield Creek and West Bett's Track prospects align along a zone parallel to the Cleveland - Mt Bischoff zone.

The Bell's Reward, Discoverer, Godkin Extended and Godkin mineral occurrences do not appear to have any direct regional aeromagnetic expression and finding extensions to, or similar occurrences of, this style mineralization is difficult.

These occurrences do, however, appear to align along a fault which may have had a primary mineralizing influence. A possible carbonate-replacement situation may occur to the south of Godkin in the West Bett's Track area, where a distinct isolated magnetic anomaly appears. Reconnaissance and follow-up work done to date does not appear to have directly followed up the source of the magnetic anomaly for a possible pyrrhotitic tin/tungsten assemblage.

Away from the immediate area of study two zones of interest have been outlined:-

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- (i) two localized magnetic lows along the north-western contact of the Meredith Granite - these may indicate localized intense alteration and greissenisation, and
- (ii) several groups of magnetic highs along the eastern margin of the Meredith Granite - these may indicate skarn and or carbonate replacement potential.

3.2 THE NORTHERN MARGIN OF THE MEREDITH GRANITE (figure 3 & 4)

There is clear evidence that the Meredith Granite has marginal intrusive phases, including porphyries, and that it has been responsible for local strong contact metamorphism. Around its northern margin, its contact transgresses the Precambrian Whyte Schist complex/Cambrian sediment boundary. Any primary magnetic contrast between these two rock groups is obscured by the overriding effect of hornfels alteration and associated metamorphic development of magnetite within selective sandstone/siltstone horizons.

The Contact Creek Dighem survey resulted in a useful magnetic map which, when "downward continued", (ie., enhanced) shows that the apparent arcuate aureole around the north-western contact of the

8.

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Meredith Granite is actually the resultant of numerous magnetite - hornfels zones which strike north-south (along preferential sedimentary units) and whose magnetite content increases toward the granite contact. The magnetic anomalies followed up in the 1980/1981 field season; namely, 104W, 104E and 107/108 are obviously caused by such local elevations in magnetite content. This metamorphic development of magnetite is difficult to distinguish from skarn situations - this is highlighted, for example, by the similarity of the Scheelite Creek (Mt Youngbuck south-east) and 104W magnetic anomalies - and field discrimination becomes essential.

Possible skarn situations not yet followed up are Dighem magnetic anomalies 102W and 102E , just to the east of E.M. anomaly 101B/102B which appears to be related to carbonaceous shales of the Precambrian Whyte Schist complex.

The Dighem resistivity map confirms the strike of the conductive Whyte Schist complex black shales, and the weathered/altered Heazlewood ultramafic complex to the east-north-east. Of particular interest in the central part of the area is the series of localized

low resistivity anomalies. The main one encompasses Mt Youngbuck and probably indicates the strong contact metasomatic alteration of the sediments, with some contribution from locally developed pyrrhotite/pyrite (?). The anomaly immediately to the north-north-west, in the Whyte River meander area is probably also caused by strong alteration of the sediments. The anomaly to the west of this, encompassing E.M. anomaly 106E, is probably also related to intense alteration and warrants ground checking for possible skarn development. It has an associated subdued magnetic response.

Another zone of possible localized intense alteration occurs immediately east of Mt Youngbuck and encompasses E.M. anomaly 102F. This zone requires field followup because of its proximity to the granite contact and the possibility that it could reflect a local mineralized alteration centre.

E.M. anomaly 102G/103E occurs in the Mt Stewart mine area, with the resistivity data remaining open to the south. Without historical data on this locality, it is difficult to gauge whether or not more work is warranted here.

4. CONCLUSIONS AND RECOMMENDATIONS

This review of geophysical data from E.L. 16/78 has mainly concentrated on aeromagnetic and Dighem data for the north-western part of the licence.

In the area covered by the Contact Creek Dighem survey, several zones still appear to have potential for carbonate replacement/skarn situations. These are:-

- (i) Dighem magnetic anomalies 102W and 102E,
- (ii) Dighem E.M. anomaly 106E and its surrounding resistivity low,
- (iii) Dighem E.M. anomaly 102F and its surrounding resistivity low, and, possibly
- (iv) Dighem E.M. anomaly 102G/103E which occurs in the Mt Stewart mine area.

On a more regional scale, the West Bett's Track aeromagnetic anomaly occurs in a favourable structural position. It is considered a high priority target for tin/tungsten mineralization.

Two possible centres of greissenisation have been outlined close to the north-western margin of the Meredith Granite,

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while three anomalies east north-east of the Cleveland mine, along the Cleveland - Mt Bischoff fault zone, may indicate a Cleveland style mineralized environment.

On the eastern margin of the Meredith Granite several groups of magnetic anomalies have been outlined for possible carbonate replacement/skarn situations.

The western rim of the Heazlewood Ultramafic complex appears to be occupied by a dunite unit whose magnetic expression indicates continuity across an area which has hitherto been mapped as containing predominantly Cambrian clastics. This dunite may be prospective for chromite occurrences.

Apart from the West Bett's Track aeromagnetic anomaly, it is difficult to outline Ordovician carbonate replacement style mineralization. However it does appear that the Bell's Reward to Godkin occurrences align along a north-west fault.

The Heazlewood complex to the north of the study area has been covered by Dighem electromagnetic surveys (for Comstaff Pty Ltd). This data may show features of interest relevant to exploration within E.L. 16/78 and should be studied.

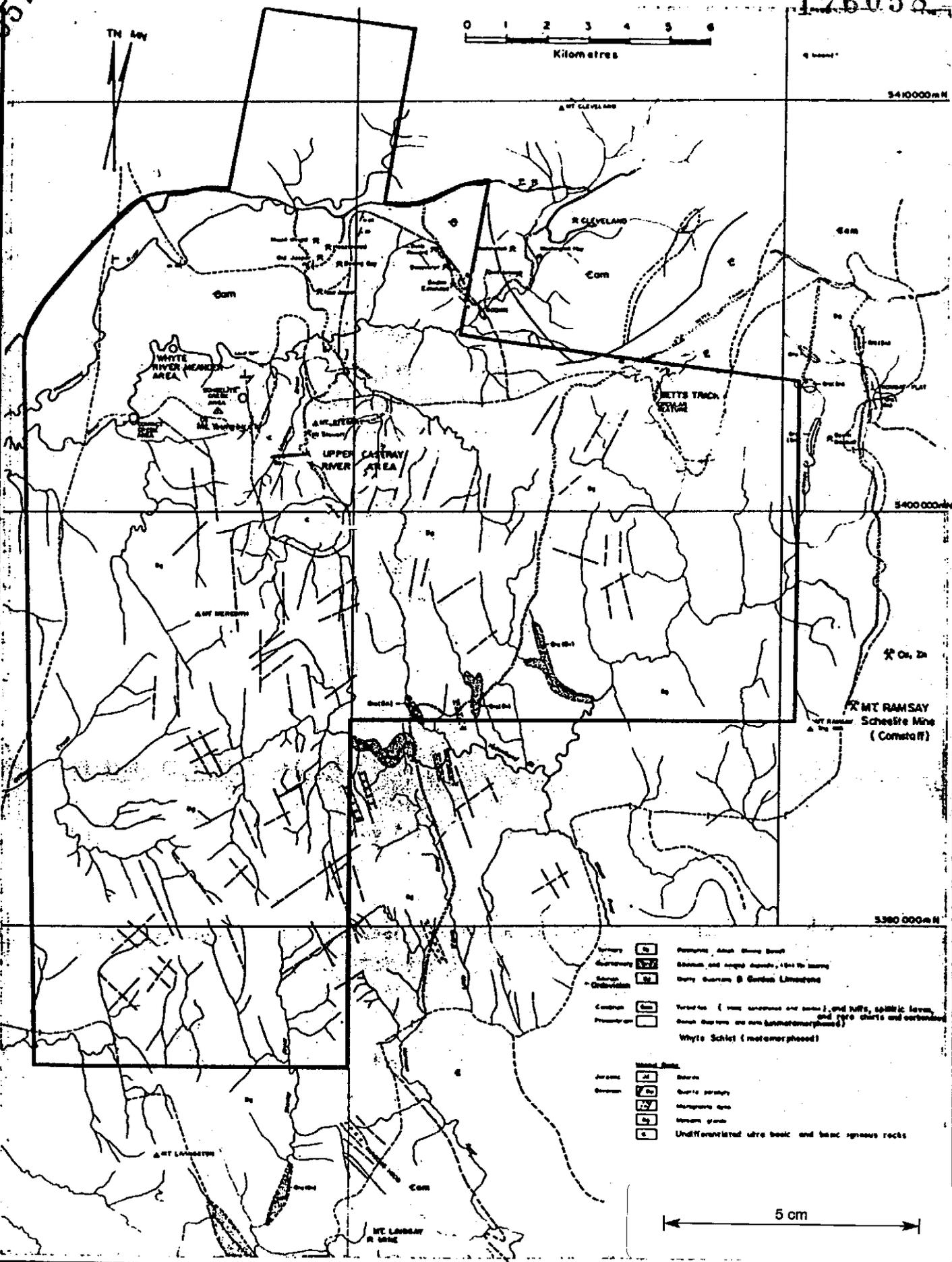
Furthermore, it is clear that much could be gleaned from a thorough structural interpretation of the regional aeromagnetic

data, including selective detailed reprocessing. This would assist in defining the main primary fault zones in the district and in producing a more accurate regional geological map.



TN 444

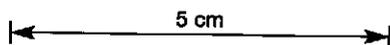
5410000m N



5400000m N

5380000m N

- Primary Permian, Devon, Silurian, Cambrian
 - Secondary Devonian and younger deposits, (not to be traced)
 - Quaternary Tertiary deposits & Gordon Limestone
 - Complex Tertiary (very extensive and porous) and tuffs, volcanic lavas, basal breccias and non-luminescent (metamorphosed)
 - Proterozoic Whyte Schist (metamorphosed)
-
- Metamorphic Schist
 - Granite Granite porphyry
 - Basalt Basaltic dykes
 - Diabase Diabase dykes
 - Granite Granite dykes
 - Undifferentiated ultra basic and basic igneous rocks



Aberfoyle Exploration Pty Ltd

Drawn:	Adapted from	Groves, 1962-7
Traced:	R. J. E.	
Checked:		
Revised by:	Date	

NORTH WEST TASMANIA
 MEREDITH EL. 16/78
 Geological Summary Map

Location code:
Date: September, 1979
Scale: 1:125,000
FIGURE 1

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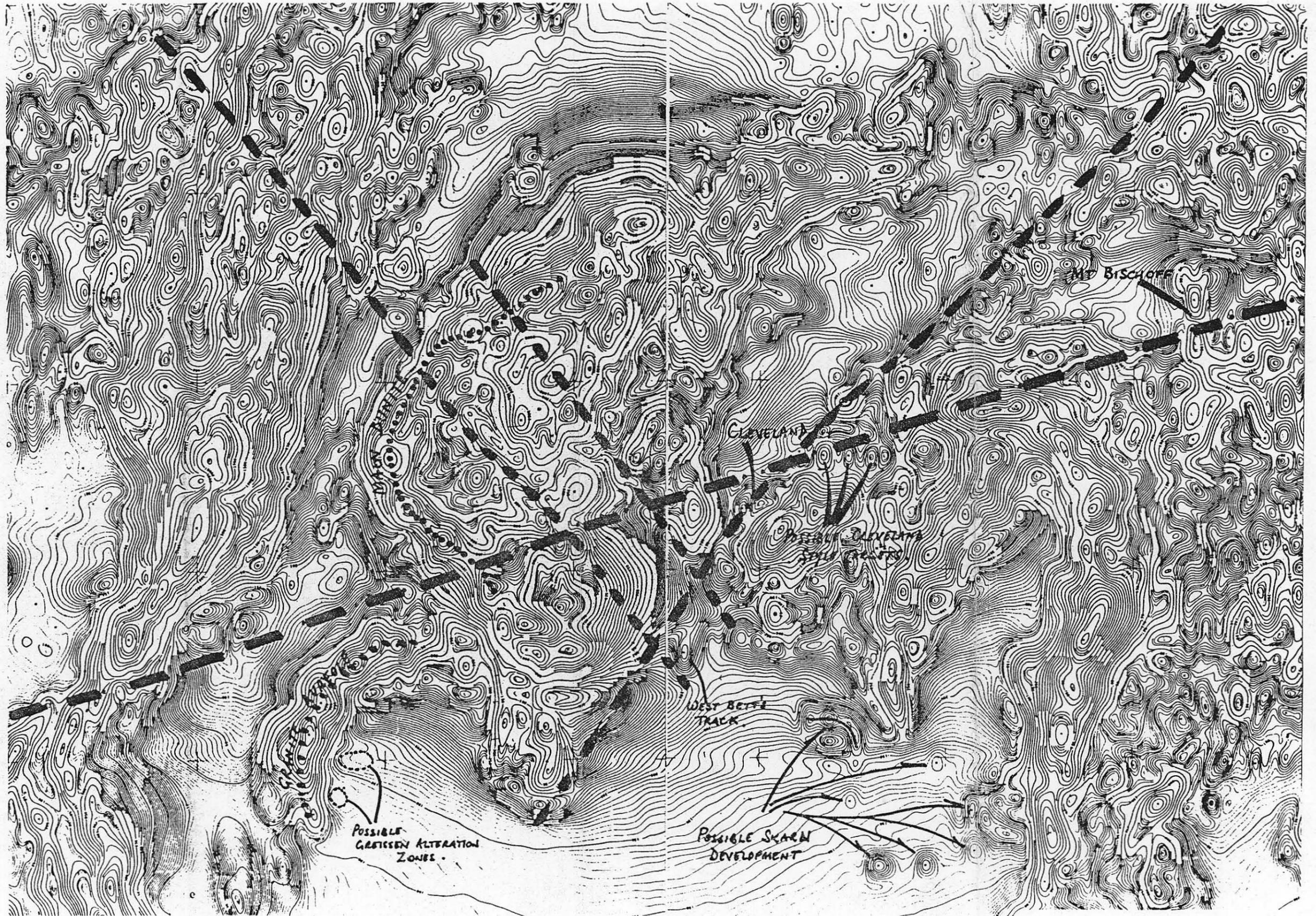
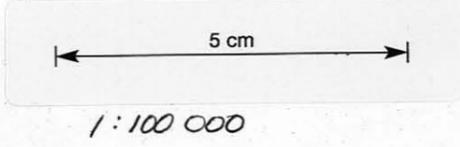


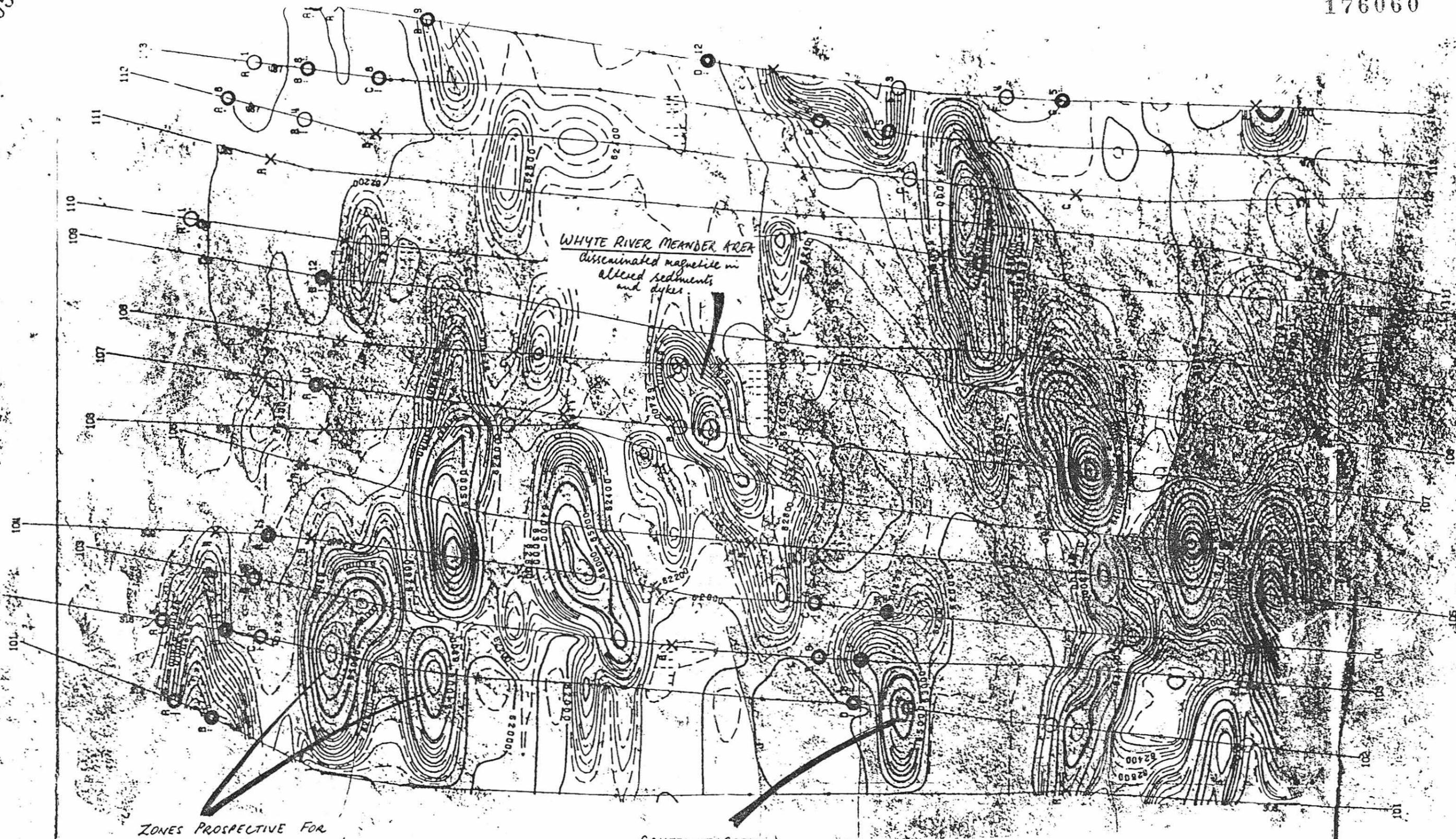
FIGURE 2

DEPT. OF MINES TASMANIA
 AEROMAGNETIC SURVEY
 WEST COAST AREA, TASMANIA



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176060



WHYTE RIVER MEANDER AREA
 Disseminated magnetite in
 altered sediments
 and dykes

ZONES PROSPECTIVE FOR
 CARBONATE REPLACEMENT /
 SKARN SITUATIONS.

SCHEELITE CREEK
 SKARN

5 cm

SCALE 1 20,000

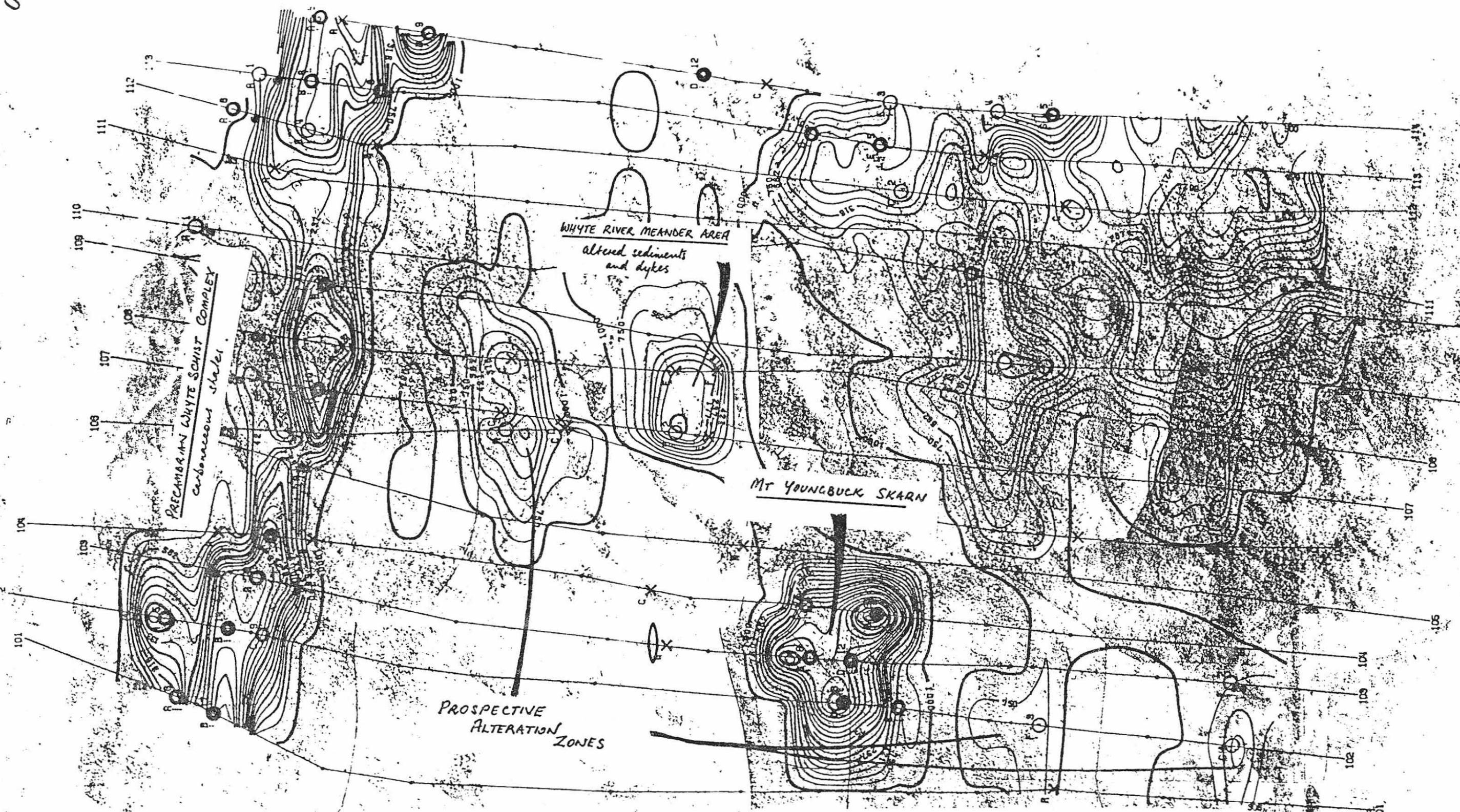
DIGHEM^{II} SURVEY

CONTACT CREEK AREA, TASMANIA
 ENHANCED MAGNETICS

FOR

ADRIAN E. EXPLORATION PTY LTD

FIGURE 3



DIGHEM^{II} SURVEY
 CONTACT CREEK AREA, TASMANIA
 RESISTIVITY
 FOR

5 cm

SCALE 1:20,000

ABERFOYLE EXPLORATION PTY. LTD.

FIGURE 4.

APPENDIX II

Mt. Stewart Max-Min field data

MT STEWART MINE

MAX-MIN TRAVERSE NO 1 (ALONG ROAD)

Rx - Tx = 100mV

By: AMH, 7-8 MARCH 1985

Rx STATION	Tilt	222 Hz		444 Hz		888 Hz		1777 Hz		3555 Hz	
		I _{PH}	O _{PH}								
200N	0	+2.5	-1.5	+2	+0.5	+2	+3	+2.5	+7	+9	+11.5
75N	0	+5	-1.5	+5	0	+5	+3	+4.5	+6	+11.5	+9
150N	0	+5.5	-2	+4	0	+4	+2	+4.5	+5	+9.5	+8
125N	0	+1	-2	0	0	+1.5	+1.5	+1	+4	+6	+6.5
100N	0	+2.5	-1.5	+3	0	+3	+2	+3	+4	+7.5	+5.5
75N	0	+1.5	-1.5	+1.5	0	+1.5	+2	+2	+4.5	+7	+8
50N	0	+2.5	-1.5	+2.5	0	+3	+2	+2.5	+5	+8.5	+7.5
25N	0	+2.5	-1	+2.5	+1	+2.5	+3.5	+3	+7	+10	+13
0	0	+1.5	-1	+1.5	+1	+2	+4	+2	+8.5	+9.5	+15
25S	-3°	+1.5	-1.5	+1	+1	+1.5	+3.5	+2	+6	+9	+12.5
50S	-3°	0	-1.5	0	+1	+0.5	+3	+1	+7	+7	+12
75S	-4°	0	-1.5	-0.5	+0.5	+1.5	+3	+0.5	+6	+7	+10
100S	-4°	+3	-2	+2	0	+3	+2	+2.5	+4	+9	+6.5

By: AMH, 7-8 MARCH 1985

Rx STATION	TILT	222 Hz		444 Hz		888 Hz		1777 Hz		3555 Hz	
		I _{PH}	O _{PH}								
375W	+9°	+5.5	-1	+5.5	+1	+6	+4	+5.5	+7	+11	+13
350W	+9°	+1.5	-1	+1.5	+1	+1.5	+3.5	+2	+7	+9	+11
325W	+8°	+0.5	-1.5	0	+0.5	+0.5	+2.5	+0.5	+5	+5	+8.5
300W	+6°	-2	-2	-2	-1	-1	-0.5	-2	0	+1	-3
275W	+6°	+1	-2.5	+1	-1.5	+1	-2	+0.5	-3	+1	-7
250W	+5°	-1	-2.5	-1	-1.5	-1	-1	-2	-2	-0.5	-4.5
225W	+5°	+2	-2	+1	-0.5	+1.5	+1	+1	+2.5	+5	+4
200W	+5°	+2.5	-1.5	+2	+0.5	+2.5	+2.5	+2.5	+5.5	+7	+9.5
175W	+4°	+3	-1	+3	+0.5	+3	+3	+3	+6	+10	+10
150W	+2°	+2.5	-1.5	+2.5	+1	+3	+3	+3	+7	+10	+11.5
125W	0	+1	-2	0	0	+0.5	+1.5	+0.5	+3.5	+5	+5.5
100W	0	-2.5	-2	-3.5	-2	-3.5	-1.5	-4.5	-2	-1.5	-5
75W	0	-2.5	-2.5	-3	-2	-3	-2	-3.5	-4	-2	-8
50W	0	-0.5	-2.5	-1	-2.5	-1.5	-3	-3	-5.5	-2	-11
25W	0	-4	-2.5	-4	-2	-4	-2½	-5.5	-4	-5	-9
0	0	-7	-2.5	-8	-2	-8	-3	-9	-5	-10	-10.5
25E	0	-4.5	-2.5	-5	-2	-5	-2½	-7	-4.5	-7	-10
50E	0	-5	-3	-4	-2	-4½	-2	-6	-4	-7	-8

066
MT STEWART MINE

MAX-MIN TRAVEL NO: 3 (SOUTH WEST)
OF NO. 2 ADIT

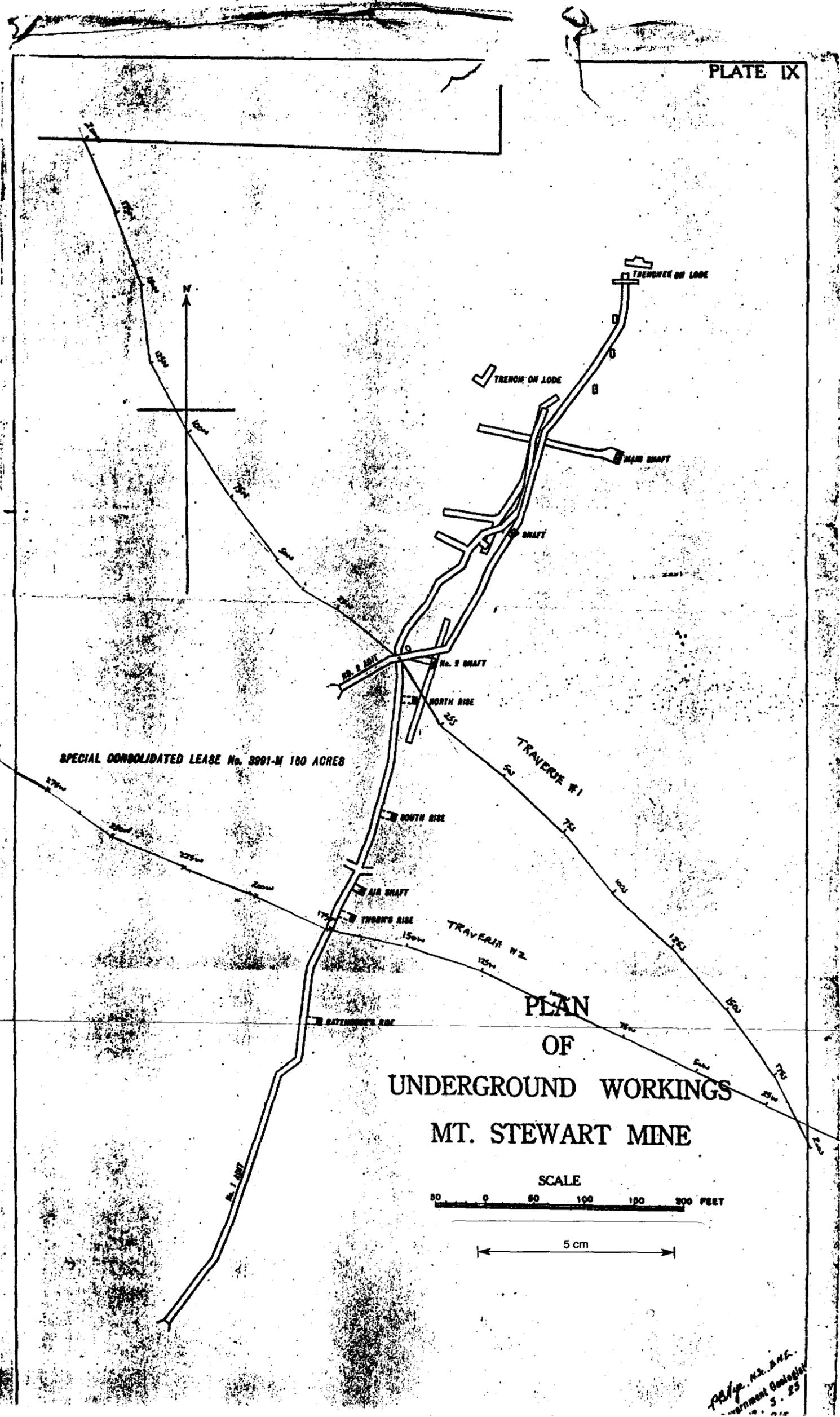
Rx - Tx = 100m

By: AMH, 7-8 MARCH 1985

Rx STATION	TILT	222 Hz		444 Hz		888 Hz		1777 Hz		3555 Hz	
		Iph	Oph	Iph	Oph	Iph	Oph	Iph	Oph	Iph	Oph
0	-20	-3	-1.5	-4.5	-0.5	-3	+0.5	-4.5	+1.5	-2	+2
25 NW	-11	-1.5	-1	-2	0	-2	+2	-2	+5	+2	+8
50	-10	-2.5	-1	-2.5	+1	-2.5	+3.5	-2.5	+8	+1.5	+15
75	-10	+8.5	-1.5	+9	0	+9	+2	+9	+5	+13	+9
100	-17	+14.5	-2	+14.5	-1	+14.5	0	14	+0.5	+17	+1
125	-20	+14.5	-2	+14.5	0	+14.5	+1	+14.5	+3	+17.5	+7
150	-15	+28	-2	+28	0	+28	+2.5	+28	+6	+35	+12
175	-14	+10	-1.5	+9.5	0	+9.5	+2	+9.5	+5	+13	+8
200	-5	+15	-1.5	+15	+1	+16	+5	+16.5	+10	+24	+17.5
225	-4	+7	-1	+6.5	+1.5	+7	+4.5	+7.5	+9.5	+15	+17
250	-3	+1.5	-0.5	+2	+1.5	+2	+4.5	+2.5	+9	+9.5	+15.5
275	-7	+4	-1	+4.5	-1	+5	+3	+5	+6.5	+12	+11.5
300	-4	-1	-1	-1	+1	-1	+3	0	+6	+5.5	+10
325	-7	+2.5	-2	+2.5	-0.5	+2.5	+1	+3	+2.5	+6.5	+4
350	-7	0	-2	0	-0.5	0	+1	+0.5	+2	+3.5	+2.5

MAX-MIN TRAVERSE LOCATIONS
 MT. STEWART MINE
 TRAVERSES PICKED-UP BY TAPE AND COMPASS

08E



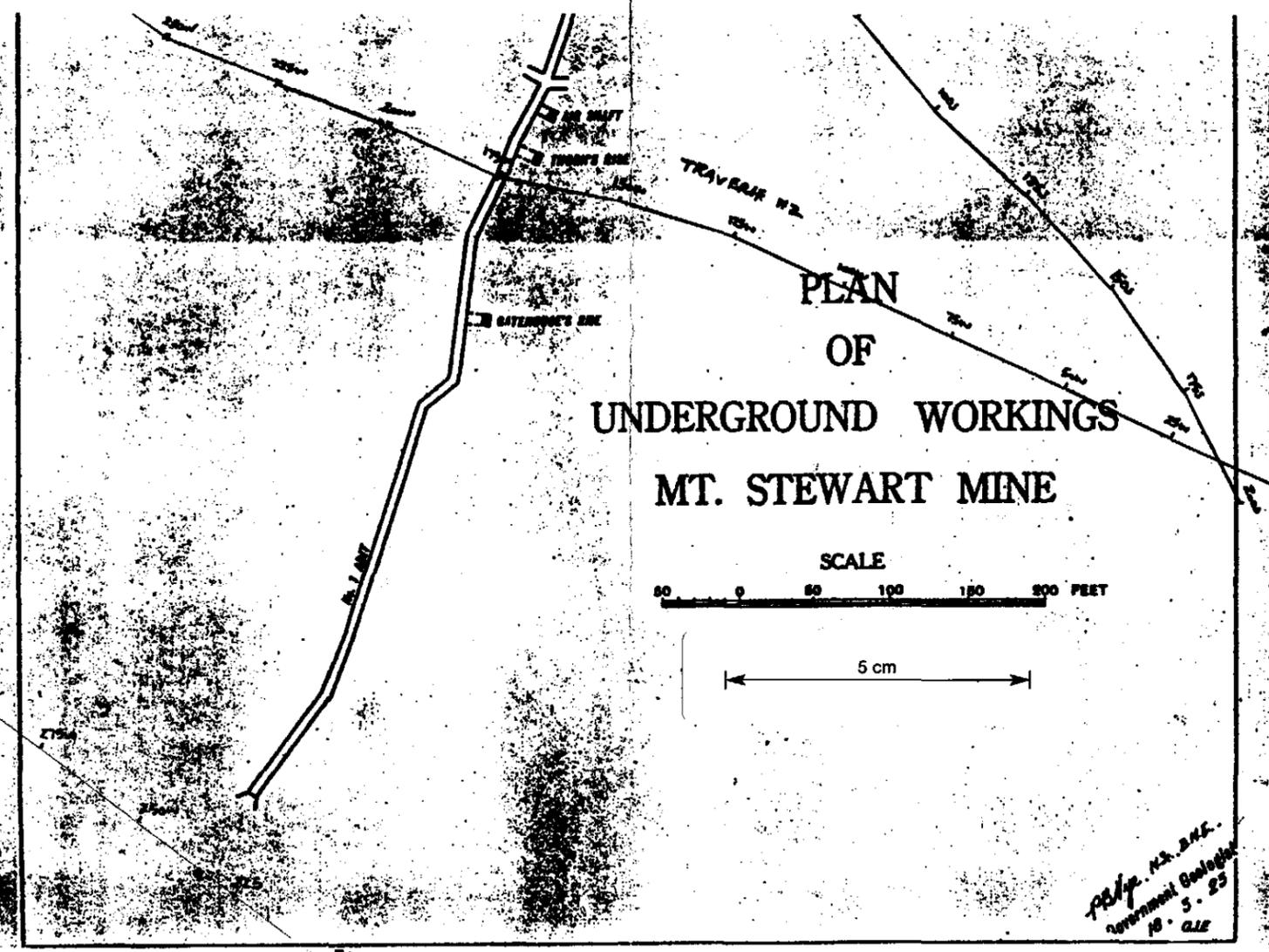
176066

P.B. & M.S. D.M.C.
 Government Geologist
 5. 25

Amn
 11/3/25

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176067



W. M. A. B. E.
Government Geologist
10. 5. 25
A. L. E.

Max-Min Traverse No. 3
MT STEWART MINE

TRaverse #3

AMH

190
067

APPENDIX III

Statement of Expenditure

ABERFOYLE EXPLORATION PTY LTD

PROJECT COST REPORT
AS AT PERIOD : 5 1985

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JOB NO: 3002

MEREDITH

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CODE	ACCOUNT DETAIL	FINAL YEAR EXPEND
GEOLOGY		

1401	GEOLOGY - SALARIES	3660.00
1404	GEOLOGY - MATERIALS	7.90
1405	GEOLOGY - TRAVELLING	340.20
1406	GEOLOGY - FUEL	94.13
1410	GEOLOGY - DISTRICT ACCOMMODATION	1620.50
1412	GEOLOGY - VEHICLE COSTS	30.00

**TOTAL	GEOLOGY	5752.73
		=====
GEOPHYSICS		

2001	GEOPHYSICS - SALARIES	622.00
2002	GEOPHYSICS - WAGES	554.00
2003	GEOPHYSICS - CONTRACTORS	1673.75
2012	GEOPHYSICS - VEHICLE COSTS	140.00

**TOTAL	GEOPHYSICS	2989.75
		=====
TENURE		

6101	TENURE - SALARIES	435.00

**TOTAL	TENURE	435.00
		=====
OTHER SERVICES		

7007	OTHER SERVICES - COMMUNICATIONS	183.53

**TOTAL	OTHER SERVICES	183.53
		=====
INDIRECT COSTS		

9070	INDIRECT COSTS - ADMINISTRATION	1404.14

**TOTAL	INDIRECT COSTS	1404.14
		=====
** TOTAL	JOB COSTS	10765.15
		=====