
Sherlock Minerals Ltd
c/- 169 Fullarton Rd, Dulwich 5065, South Australia
email: sherlock@sherlockminerals.com.au

**COMBINED ANNUAL TECHNICAL REPORT
SORELL PROJECT
EL6/2013 & EL7/2013**

SORELL PENINSULA, TASMANIA

For the period 22nd October 2013 to 21st October 2014

**P.W. REID, G.L. ASCOUGH, B.J. VAN DER STELT
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ABSTRACT

The Sorell Project comprises two exploration licences, EL6/2013 & EL7/2013, located on the Sorell Peninsula in western Tasmania, approximately 30km south of the Township of Strahan. Exploration is being undertaken for

- Massive sulphide mineralisation hosted within the Cambrian Mount Read Volcanic equivalent strata which are host to all of Tasmania's significant base and precious metal mines with accumulated resources of > 350 Mt of ore.
- Porphyry / Intrusive -style copper gold mineralisation at the Thomas Creek Prospect.
- Nickel-sulphide and platinum-group element mineralisation associated with middle Cambrian mafic and ultramafic rocks of the Hibbs Ultramafic Belt.

Work completed during the period included:

- Compilation and review of open-file regional geophysical datasets; target generation
- Dipole-dipole induced polarisation (IP) surveys (total 7.3 line km)
- Geophysical modelling
- Field reconnaissance
- Line and track cutting
- Soil and rock chip geochemical sampling (total 97 samples)
- Petrological studies

At the Thomas Creek Prospect IP surveys revealed the presence of a significant chargeability anomaly approximately 300 m wide (open) and 500 m long at 100-200m depth. This does not appear to have been tested by historical shallow exploration drill holes and is strongly recommended for drill testing.

Within the Hibbs Ultramafic Belt, reprocessing and interpretation of historical airborne electromagnetic survey data identified a high amplitude conductive target, 'Henrietta', approximately 1.3 km in strike length. Preliminary field investigations at Henriettea located gossanous material with elevated nickel and platinum assays. A program of rock chip sampling and ground EM surveys is recommended for this prospect.

Within the Mount Read Volcanic equivalent strata, reprocessing and interpretation of historical airborne electromagnetic survey data has identified numerous conductive targets warranting field reconnaissance and ground EM follow-up.

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Appendix 6: ICP geochemical analyses (digital file only)

Appendix 7: Petrological report

1. BACKGROUND

1.1 Location and access

Exploration Licences 6/2013 and 7/2013 are located on the Sorell Peninsula in western Tasmania, approximately 30km south of the Township of Strahan (Figure 1). The tenements fall entirely within the Southwest Conservation Area and are abutted to the east by the Franklin Gordon Wild Rivers National Park, and to the northeast by the Macquarie Harbour Historical Site. The Southwest Conservation Area has been proclaimed by the Tasmanian Government as a Strategic Prospectivity Zone in recognition of the mineral potential of the area.

The area has a high annual rainfall of approximately 1750 millimetres. The natural vegetation is dominated by rainforest and related scrub, most dominantly *Nothofagus* rainforest. Additionally there are areas of wet eucalypt forest and woodland flora types, heathland and coastal vegetation complexes. *Bauera* scrub areas are very thick and generally impenetrable without prior line cutting work. Where tree canopy is high, undergrowth is significantly less and access over the ground can be achieved with some effort.

Access to the project area can be achieved via coastal landing site or by helicopter from Strahan. Access within the project is achieved via historical exploration tracks (most of which are currently unsuitable for vehicular egress), or on foot. All maps and locational data provided in the report uses the GDA 94 reference datum.

1.2 Authority history

The Sorell Project tenure comprises two granted Exploration Licences with a combined area of 394 km² (Figure 1). Exploration Licence EL7/2013 is held by Sherlock Minerals Pty Ltd, and Exploration Licence 6/2013 is held by Thylacine Resources Pty Ltd, a 100% owned subsidiary of Sherlock Minerals. Sherlock Minerals acquired Thylacine Resources through a share purchase agreement after the award of EL6/2013. Both tenements were awarded through an Exploration Release Area competitive bid process, and have been granted for a period of five years. Tenement details are provided in Table 1.

TENEMENT	SIZE (km ²)	GRANT DATE	MINIMUM EXPENDITURE FIRST 2 YEARS
EL 6/2013	225	2/10/2013	2,680,000
EL 7/2013	169	22/10/2013	813,750
TOTAL	394		\$3,493,750

Table 1: Sorell Project tenement particulars

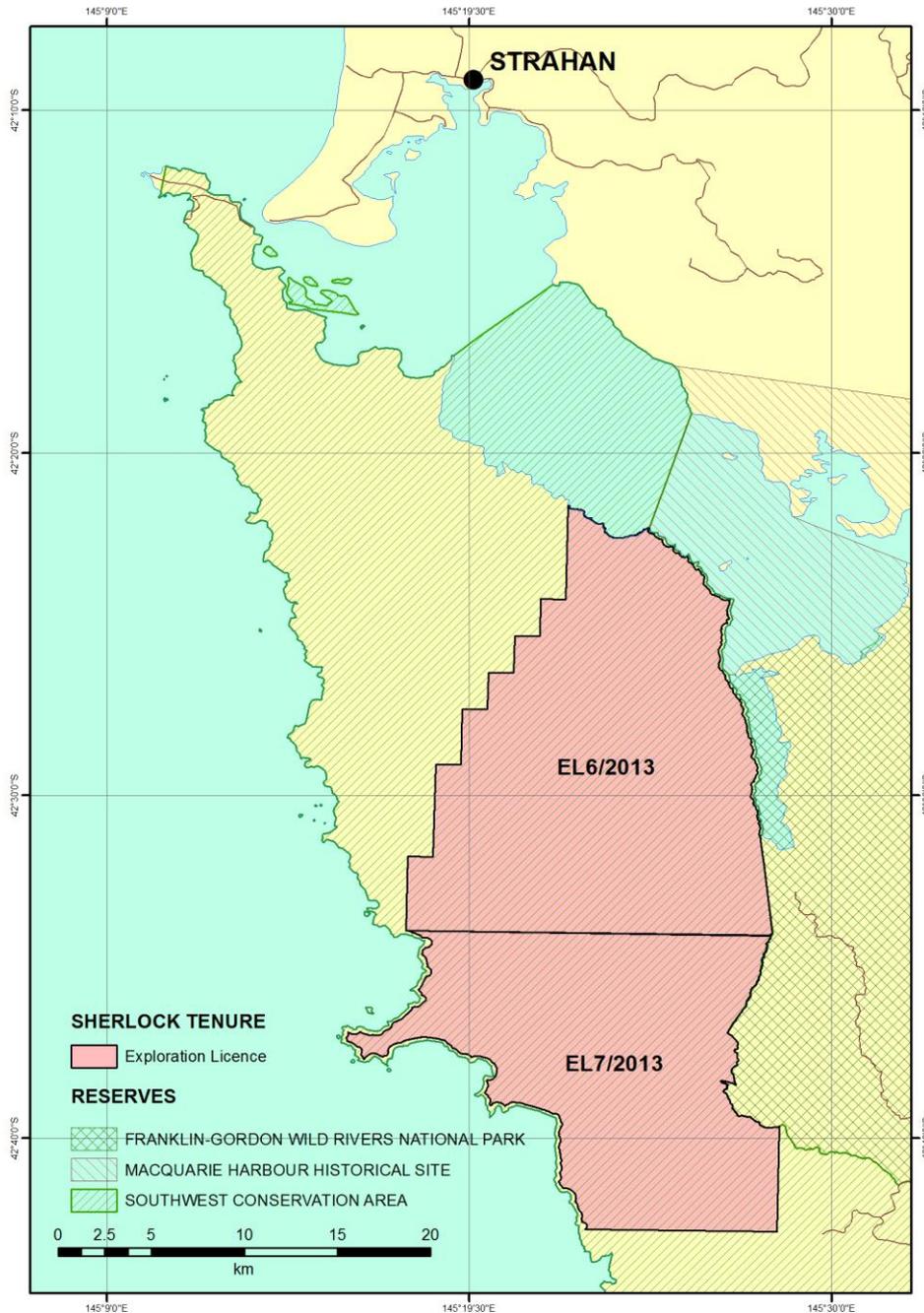


Figure 1: Sorell Project location plan

1.3 Regional geology

The Sorell Peninsula Project covers a broad swathe of Cambrian Mount Read Volcanic equivalent strata, which are host to all of Tasmania's significant base and precious metal mines and mineral occurrences (Figure 2). The Mount Read Volcanics have been a significant producer of base metals for most of the 20th Century, hosting five major deposits with accumulated resources of > 350 Mt of ore (McNeill, 2013).

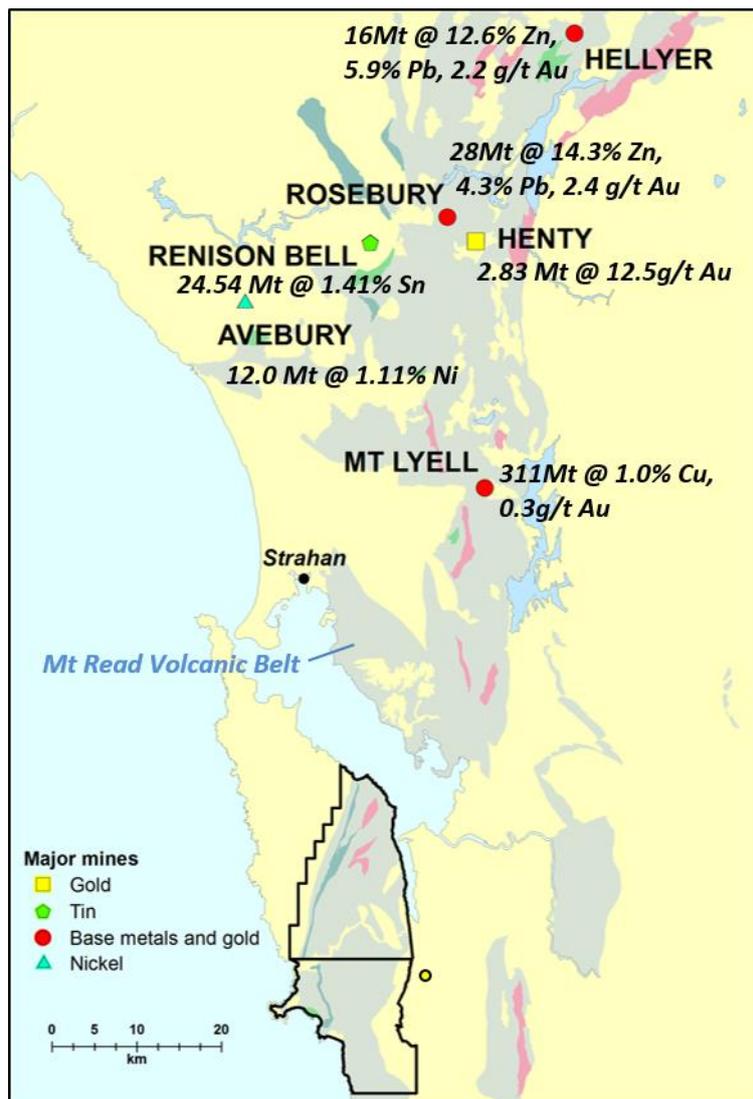


Figure 2: Pre-Permian published geology and major mineral deposits

The geology of the Sorell Peninsula has been described in unpublished company reports of BHP and Amoco/Cyprus, and in White's (1975) PhD thesis. Mapping in the late 1960's by BHP was largely based on coastal exposures and a few inland traverses, with a large component relying upon aerial photo interpretation. Subsequent explorers have relied heavily

upon BHP's initial mapping, with a re-interpretation provided by Close and Reid (1995). Limited description of the regional geology is given in Corbett and Solomon (1989).

Regional mapping by the Mines Department at 1:50,000 has covered the area to the north of Varna Bay ("Macquarie Harbour" map sheet; McCleneghan and Findlay, 1989) and to the south of High Rocky Point ("Montgomery" map sheet; Brown, 1988). The Hibbs 1:50,000 sheet, encompassing the Thomas Creek area, lies between these and has been partially mapped but remains incomplete due to lack of funding. A report by Brown et al. (1991) supplements this mapping and provides the most extensive discussion and interpretation of the Sorell Peninsula geology thus far. Brown et al. (1991) recognised two Precambrian rock successions and six Eocambrian-Cambrian volcano-sedimentary associations in the region (Figure 3). These multiple-deformed associations are bounded by a series of NE to NNE-trending faults and the distribution of these associations is interpreted by Brown et al (1991) to result from thrust sheet stacking. Their structural model of "thin skinned tectonics" probably incorporates a pre-Ordovician thrusting event, reworked by late (Devonian?) thrusting. Thrusts are interpreted as eastward dipping with west/north-west thrust direction. Younger transcurrent faulting further disrupted the Point Hibbs Melange Belt.

The Cambrian andesites and rhyolites of the Noddy Creek Volcanics crop out in the southern portion of the Sorell Peninsula and are inferred to extend further south past Point Hibbs (Brown et al., 1991; Close and Reid, 1995). A series of diorite intrusions, and an extensive intrusive complex of diorites occurs within the southern portion of the Noddy Creek Volcanics, south west of the Timbertops Syncline.

The relationship of the Noddy Creek Volcanics to the Mt Read Volcanics is somewhat enigmatic. The Mt Read Volcanics crop out in a N-S trending belt to the east, and extends from Mount Darwin, disappearing beneath a Tertiary Graben to re-emerge further south in the D'Aguillar Range area. Corbett and Solomon (1989) have correlated the Noddy Creek Volcanics with the Mt Read Volcanics based on similar calc-alkaline composition, and suggest the Noddy Creek Volcanics could be a smaller, separate arc or sub-arc west of the main Mt Read Belt. More recent work by Brown et al (1991) has suggested a more direct correlation based on geochemical similarities of the southernmost Noddy Creek Volcanics to volcanics of the Que River-Hellyer area.

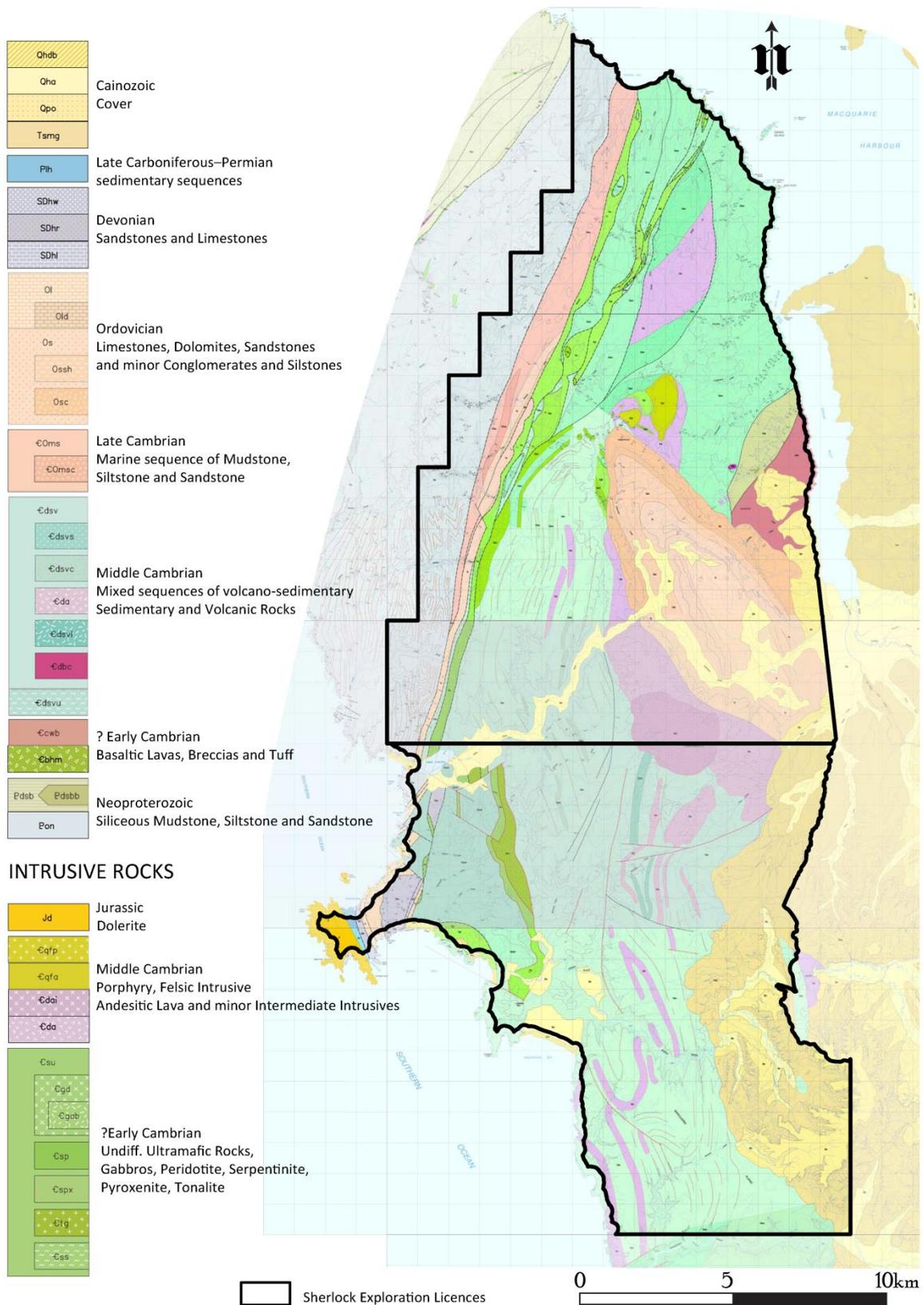


Figure 3: Sorell Peninsula published geology

1.4 Previous Investigations

The lack of road access, absence of any permanent settlements, the difficult and scrubby nature of much of the country, have all served to inhibit exploration of the area. Knowledge and understanding of the geology has mostly come in the last four decades from several regional mineral exploration programs by large companies and by regional mapping surveys by Mineral Resources Tasmania through the 1990's.

Sporadic small-scale mining/prospecting was carried out around the beginning of the 20th century for asbestos at Asbestos Point, copper at Birthday Bay (where a few tonnes of chalcopyrite, bornite and copper carbonates were produced from near-shore workings and alluvial osmiridium, gold, and chrome along the Spero River south of Point Hibbs and on creeks along the north coast near Gravelly Beach and parts of Birchs Inlet.

1956–1962 Lyell-EZ Explorations (LEE).

A large helicopter-based exploration program was undertaken by Lyell-EZ Explorations (LEE) over an area stretching from Queenstown to Port Davey from 1956 to 1962. This ambitious program greatly expanded knowledge of the geology of South West Tasmania, which was largely unknown country at that time, but did not result in any commercial mineral discoveries. Airborne magnetics (the first over the southwest), EM and scintillometer surveys were flown over much of the area in 1958, and a variety of ground geophysical methods were used. The ultramafic belt between Point Hibbs and Macquarie Harbour was discovered (Hibbs Ultramafic Belt).

1964–1972 BHP Exploration.

A second major helicopter-based exploration program, covering most of South West Tasmania (9,600 km²), followed soon after, and was conducted by BHP between 1964 and 1972. The project resembled a geological survey in many ways, and much regional mapping was undertaken. BHP based their exploration on follow-up of the LEE aeromagnetics and EM surveys, with stream sediment geochemistry as their other main regional technique, however, Au and Sn were not assayed for.

BHP spent considerable resources cutting tracks and costeans along the northern part of the Hibbs Ultramafic Belt, concentrating on the nickel and chrysotile asbestos potential. Rock

chip sampling from costeans across this contact returned up to 0.8% Cu and 0.15% Ni. In addition a zone of disseminated pentlandite about 12 m wide occurring as small blebs up to 6 mm in slightly sheared olive green serpentinite had been found along with specks of pentlandite in shear planes in a costean. One hole was drilled to 95m, testing a ground EM anomaly. No anomalous nickel was intersected with the anomaly being explained by an intersection of 3.4 meters of graphitic siltstone below the ultramafic contact. BHP recommended that EM traverses be run at 30 m intervals along strike but no further work was done on nickel. Towards the south of the belt an area of anomalous Zn and Ni was determined from stream sediment sampling in creeks between Hibbs Lagoon and Point Hibbs.

Asbestos was discovered in the northern part of the ultramafics and this became a major focus of further exploration by BHP in the area. This work culminated in the outlining of 8.5 million tonnes of 2.3% asbestos.

In 1971/72 BHP followed up an aeromagnetic anomaly southwest of Birch's Inlet with ground magnetics, soil sampling and rock chip sampling (Thomas Creek Prospect). The results are presented unprocessed with no discussion and it appears that there was no follow-up. Several samples from this work yielding up to 1000 ppm Cu, 1000 ppm Pb, 100 ppm Zn and up to 100 ppm Ag. The samples were taken from rocks with visible disseminated sulphides, some of the rocks being boulders. BHP's interest in the Sorell Peninsula was relinquished in 1972

1983-88 Amoco Minerals Australia Company (Managers) (later Cyprus Gold Australia Corp.), in joint venture with Placer Development Ltd and Poseidon Minerals Ltd.

Work initially comprised a detailed 150m line spaced airborne aeromagnetic and radiometric survey to assist geological mapping as well as to locate any tin replacement (ie Renison Style) deposits over the whole Sorell Peninsula. In 1983-84 Amoco conducted reconnaissance mapping and sampling of the Noddy Creek Volcanics around Timbertops north to Briggs Creek and south to Thomas Creek to assess various aeromagnetic anomalies. The main target for exploration was a polymetallic volcanogenic massive sulfide orebody with minimum reserves of 15 million tonnes of 20% lead-zinc with gold plus silver credits similar to the Rosebery and Que River/Hellyer deposits 70 kilometres to the north.

A DigHEM survey was flown over the northern portion of the Hibbs Belt and Noddy Creek Volcanics in 1986 (Figure 4), which identified seven targets that were never followed up, as coincident DigHEM work to the south over the coeval Lucas Creek Volcanics at Elliot Bay located higher tenor anomalies which became the focus of later work.

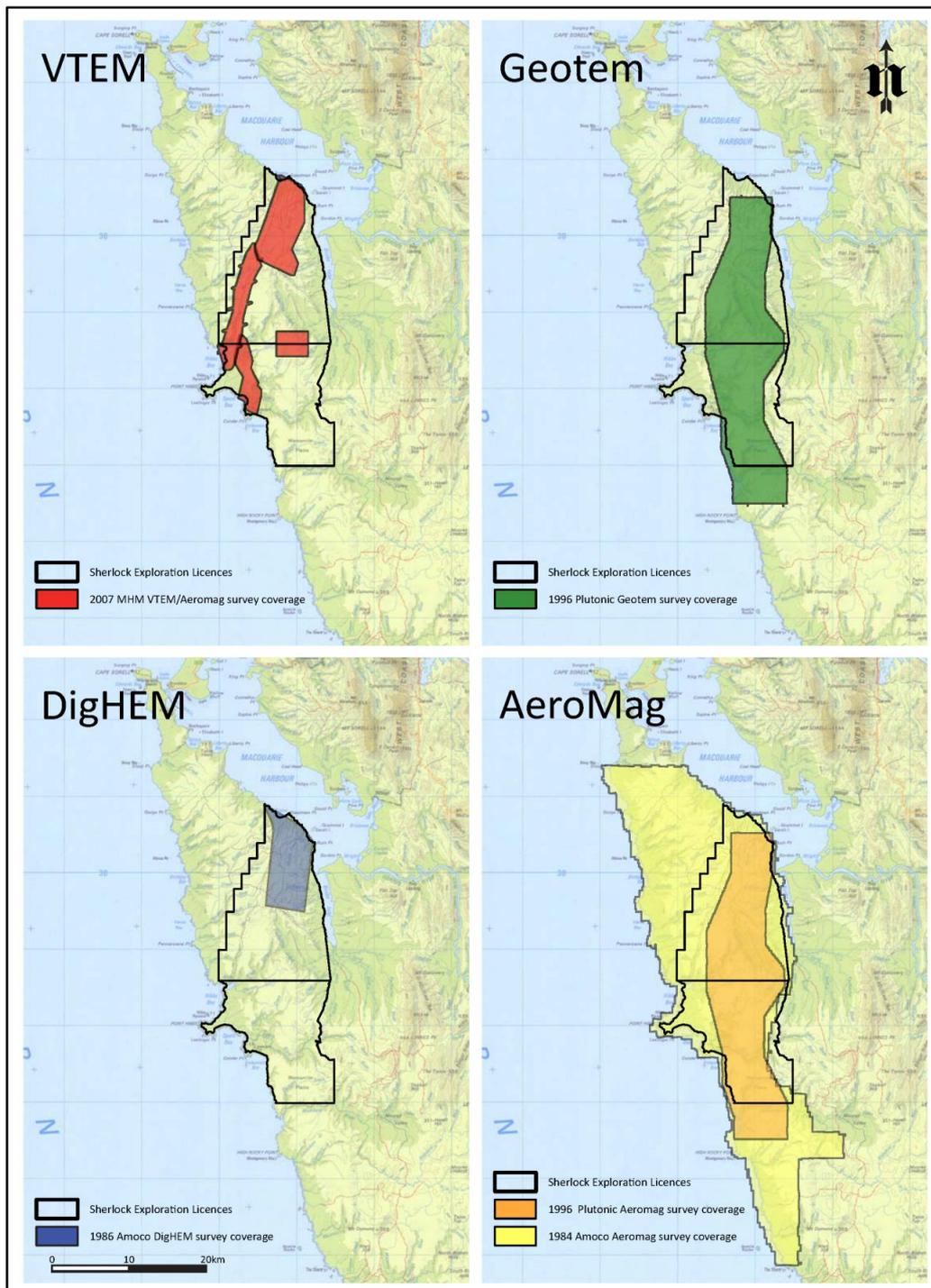


Figure 4: Summary of airborne geophysical surveys

Weak base metal veining was reported adjacent to diorite at Timbertops, and more significantly a Cu-Au (Ba) association with diorites and intermediate volcanics was recognised in the Warrens to Thomas Creek area. Here a peak value of 0.2% Cu, 0.1% Ba and 0.97 g/t Au was related to a sub-volcanic diorite intrusion south west of the anomalous Cu-Pb volcanics reported by BHP.

Follow-up bedrock soil surveys over a grid at Thomas Creek in 1984 followed and this outlined a zone of anomalous copper approximately 300 metres by 400 metres in size which was greater than 250 ppm Cu. Amoco had a polymetallic VMS focus and the absence of significant associated Pb-Zn with the copper or regularly repeatable high Au downgraded the prospect and no further exploration was conducted.

1992-1998 Plutonic Operations limited

Plutonic Operations Ltd were granted two licences EL4/1992 and EL7/1992 which covered most of the ground currently held by Sherlock Minerals. In 1993-94 plutonic planned to carry out a 200m line space airborne GEOTEM survey over the Noddy Creek Volcanics which are thought to be a direct equivalent of the fertile Mt Read Volcanics, but occur in a possible sub-rift immediately west of the main volcanic belt. Contractor delays meant this was not carried out until March 1996 (Figure 4). The survey identified approximately 20 targets that warranted follow up. This appears not to have occurred as ground operations had shifted by that time to Thomas Creek Prospect.

During the 1994-95 period a large programme of gridding, soil sampling, and petrology over the Thomas Creek Prospect confirmed Amoco's results and indicated a significant zone of alteration with the characteristics of a porphyry Cu-Au system. The copper soil anomaly extended approximately 1000 m x 700 m, with other satellite anomalous zones also appearing. Many exceptional copper soil values were returned over 1000 ppm and includes 2 samples one recording 2.4% Cu and 1.04 g/t Au and another of 7.5 % Cu and 2.96 g/t Au in highly pyritic, chloritic and malachite bearing interpreted microdiorite. Elsewhere gold values were generally below detection, apart from where very high copper (>2000 ppm) were sampled. Panned concentrate from drainage areas fringing the eastern side of Thomas Creek plateau returned some visible gold with assays returning up to 3 g/t.

In 1995 Zonge Engineering were contracted to conduct two gradient array surveys totalling 7.0 line km over the grid area and three dipole-dipole lines amounting to 1.25km within the detailed grid. These surveys were designed to outline the extent and relative intensity of disseminated or stockwork vein controlled sulphide mineralisation in the Thomas Creek prospect area. The IP surveys successfully defined one major and three minor discrete chargeability zones. Zone A is a broad (600m x 400m) multi peaked, moderate to strong (3 times background) chargeability anomaly coincident with disseminated pyrite and copper anomalism in the detailed grid area.

In 1996 a light "Gopher" rig was used to test areas of high Cu soil geochemistry and corresponding IP chargeability. The program comprised 8 BQ sized holes angled 45 degrees to the South and 90 -127m hole depth. Significant core loss (clays – highly altered/weathered) was encountered however more consolidated core sections showed intense K-feldspar–silicification, pyrite, chlorite, actinolite, magnetite, heamatite, pyrite, chalcopyrite with late tourmaline, pyrite, smectite, and epidote alteration. The drilling revealed widespread copper anomalism, such as 58 m @ 0.08% Cu from 40 m in TCD2 and 15m @ 0.17% Cu from 32m in TCD5. Plutonic were disappointed that better copper grades were not intersected, given the high tenor of the soil geochemistry however did recognised that this was a large, probable porphyry style mineralised system, that required expanded exploration and deeper drilling. After failing to attract a joint venture partner, and due to other core business pressures occurring in the late 90's Plutonic relinquished the area in 1998.

1998-2001 - Pacific-Nevada Mining Pty Ltd

The Hill 99 Prospect, located near the southern shores of Macquarie Harbour was identified by Pacific-Nevada Mining Pty Ltd in 1999 after a reconnaissance sampling programme located an outcrop of massive pyrite-quartz mineralisation. A subsequent soil sample campaign identified a copper-zinc anomalous (150-511ppm Cu and 150-684ppm Zn) zone extending inland along strike from the coastal pyrite-quartz mineralisation. The zone trends north-east and is broadly coincident with a topographic high. Sampling of gossanous float material along the grid lines returned sporadic anomalous gold up to 50ppb with 92ppb Au also returned from a chlorite altered lithicwacke sample. A single panned concentrate stream sample returned 5.1 g/t Au.

A subsequent gradient array IP survey carried out over the Hill 99 grid identified a linear, moderate conductivity high coincident with the copper-zinc anomalous soil zone. A bullseye conductivity anomaly was also identified. A fixed loop ground EM survey failed to identify any conductive bodies of probable economic importance, however it did show a strong conductor forming off the western edge of the survey coincident with a prominent magnetic feature. The thick vegetation precluded the survey being extended further west at that time and this target remains untested.

Pacific-Nevada drilled three diamond drill holes totalling 669 m. The first two drill holes H99-01 & 02 targeted the Cu-Zn soil anomalies/alteration and mapped gossanous float and intersected a highly altered chlorite-carbonate-fuchsite volcanic rock of mafic to felsic origin with minor Cu, Zn and Au (best result 0.3m @ 0.59% Cu). H99-03 tested the coincident high phase and resistivity low anomaly modelled at 150m depth. Localised narrow zones of pyrite-chalcopyrite (i.e. 36 cm @ 1.05% Cu) mineralisation and quartz-carbonate-sphalerite-galena veining (i.e. 30 cm @ 0.17% Pb & 0.25% Zn) with intense fuchsite alteration were intersected before drilling was stopped due to hole instability approximately 30m above the IP target.

2007 – 2012 MHM Metals

In 2010 MHM commissioned a detailed 100m line spaced helicopter borne VTEM surveys over 4 areas (Figure 4). The survey areas covered the Hibbs Ultramafic belt, an area along the north coast region, covering a portion of the Noddy Creek volcanics and over recognised VMS mineralisation at Hill 99 Prospect and over the Thomas Creek Prospect area. The surveys identified many intermediate to strong conductors, the best associated with the ultramafic in an area immediately north of BHP's asbestos work at Noddy Creek. Some of the conductors associated with the ultramafic rocks were followed up with a limited spot soil sampling campaign at EM target sites and returned highly anomalous Nickel up to 2500 ppm and gold up to 1 g/t. Other EM conductors in remote areas including some sites identified near Thomas Creek were not followed up.

At Hill 99 prospect MHM Metals drilled two further holes totalling 368m to follow up previous encouragement from Pacific Nevada's Drilling. Drill hole H99-04 tested strike persistency of mineralised intercepts from H99-01 and 2 and hole H99-05 tested the bulls eye

IP anomaly identified by Pacific Nevada work. Geochemical results from hole H99-4 showed anomalous gold with peak values of 0.105, 0.182 and 0.105ppm Au associated with fuchsite-quartz-sericite alteration of andesites and basalts from 155 to 172m. Copper from a 30cm massive quartz-chalcopyrite vein intersected at 177.6m returned a grade of 10.55% Cu, and 0.244% Zn. Independent geochemical analysis of the core suggested the sequence is comparable to suite I of Crawfords (1992) stratigraphic proposal of the Mount Read Volcanics which hosts several major deposits including Mount Lyell (Cu-Au), Henty gold mine, and Rosebery (Pb-Zn-Ag).

At Thomas Creek MHM noted the circular magnetic high edging the intermediate intrusive body and undertook soil sampling around this feature at 50 m spacing. This work extended the copper anomalous areas further south at Thomas Creek, but also identified a new region of high copper anomalism (up to 500 ppm Cu) about 1.5 km northwest of the original prospect. This new site is unconstrained and occurs along the inner magnetic rim.

1.5 Exploration rationale

Exploration is being undertaken for a variety of commodities and styles of mineralisation commensurate with the variety of mineralisation found in western Tasmania. This includes:

- Massive sulphide mineralisation hosted within the Cambrian Mount Read Volcanics and its equivalents (i.e. Noddy Creek Volcanics) which are host to all of Tasmania's significant base and precious metal mines with accumulated resources of > 350 Mt of ore.
- Porphyry / Intrusive -style related copper gold mineralisation at the Thomas Creek Prospect.
- Nickel-sulphide and platinum-group element mineralisation associated with middle Cambrian mafic and ultramafic rocks of the Hibbs Ultramafic Belt.

Exploration methodologies will include:

- Airborne and ground electromagnetic surveys to help identify massive sulphide mineralisation within the Mt Read Volcanics, and nickel sulphide mineralisation within the Hibbs Ultramafic Belt.
- Induced polarisation surveys to identify disseminated sulphides within interpreted porphyry systems at and around Thomas Creek
- Soil and rock chip sampling
- Drill testing

2. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Exploration undertaken during the period has included:

- Compilation and review of previous exploration
- Compilation and review of open-file regional geophysical datasets; target generation
- Land access notifications
- Access line cutting (total 15 line-km)
- Dipole-dipole induced polarisation surveys (total 7.3 line km)
- Field reconnaissance
- Soil and rock chip geochemical sampling (total 97 samples)
- Geophysical modelling
- Petrological studies
- Report compilation

2.1 Data compilation and review

Government databases were interrogated to identify work undertaken by previous explorers and government officers. Digital compilation of historical geochemical, geological and geophysical data into ArcGis format was undertaken. Particular focus was given to identifying high quality regional geophysical surveys in order to identify potential targets not investigated previously. Review of work undertaken by previous exploration companies is provided in Section 1.4 of this report. In particular this review identified the Thomas Creek Prospect as having significant potential for economic copper-gold mineralisation and consequently field work during the year focussed largely on this area.

2.2 Review of airborne geophysical surveys, target generation.

As discussed in section 1.4, airborne surveys have been undertaken by various exploration companies over the Sorell Peninsula dating back to 1984. Where possible the original digital data from these surveys was obtained and assessed by Sherlock. Particular attention was paid to two of the airborne electromagnetic surveys; the 200m spaced GEOTEM surveys flown by Plutonic in 1996 and the 100m line-spaced VTEM surveys flown by MHM in 2010 (Figure 4). Data from these surveys were reprocessed and re-interpreted to identify targets potentially associated with massive sulphide deposits (refer to Appendix 3). Over twenty priority one and two targets have been identified (Figure 5).

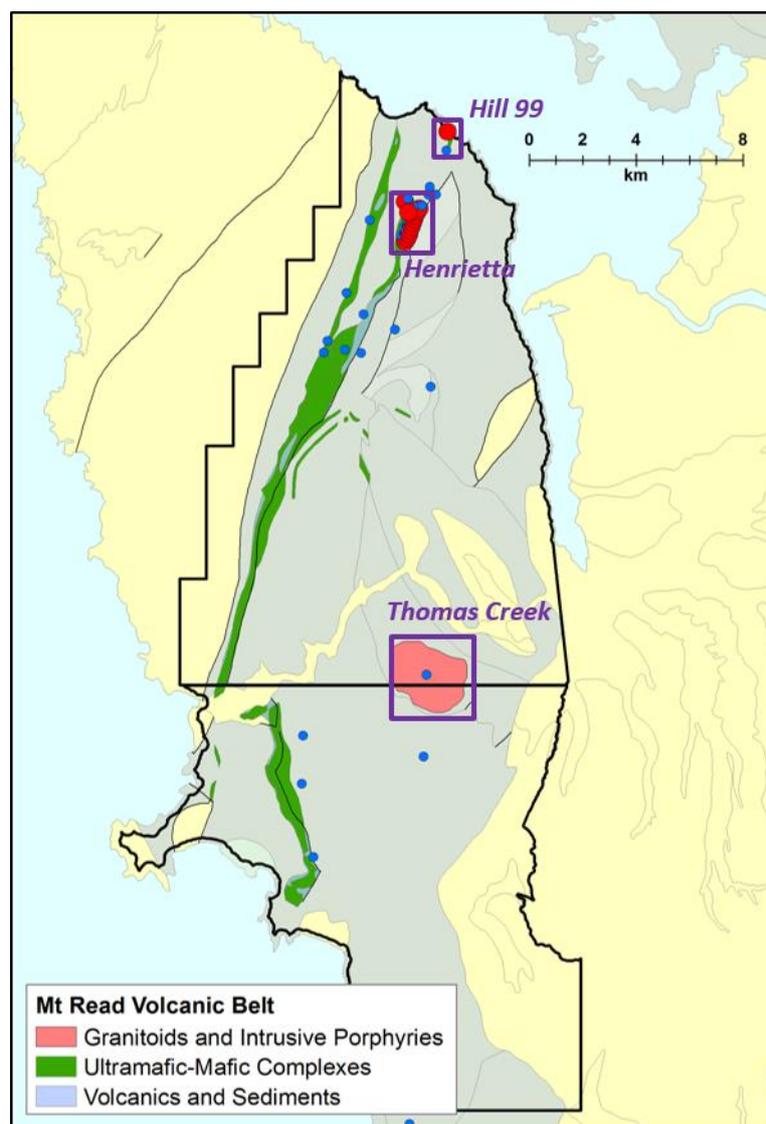


Figure 5: Airborne EM targets and simplified geology

Approximately half of the identified targets lie within the Mount Reid Volcanic volcano-sedimentary package, and these have potential for VMS style base metal and gold mineralisation. The remainder lie within rocks mapped as mafic-ultramafic complexes, and these targets have potential for Ni-PGE style mineralisation. The highest priority of these was a series of strong, late-time anomalies with a north-northeasterly strike length in excess of 1.3km, coincident with a second order magnetic feature. Due to the complex signal response of this anomaly, it had not been identified or ground checked by previous explorers (Figure 6 / Figure 9). This target has been designated the Henrietta Prospect.

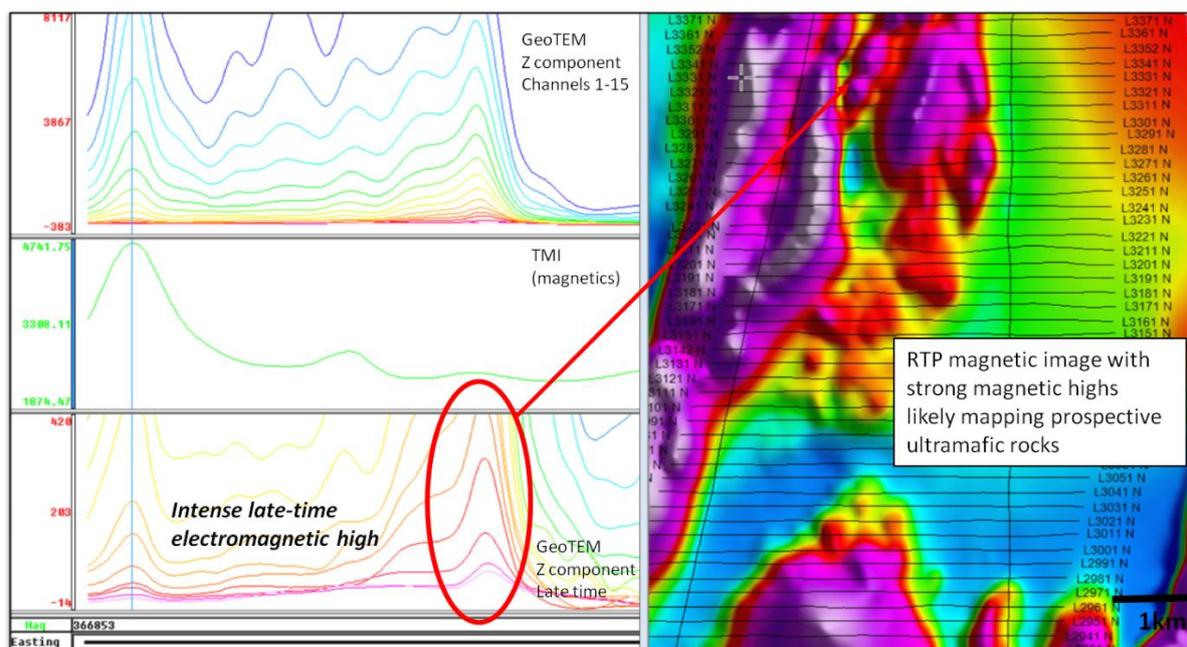


Figure 6: Selected EM profile (left hand side) and plan of aeromagnetic data (right hand side) at the Henrietta prospect.

In addition, moderate to strong late time conductors close to the known Hill 99 mineralisation have been identified (Figure 5). The targets appears to be part of the same conductive feature originally noted by Pacific-Nevada, forming off the western edge of their fixed loop ground TEM grid that was noted by the geophysicist as significant but not followed up. The EM target is coincident with the western side of linear magnetic anomaly and appears to be untested.

2.3 Induced polarisation surveys

Review of work undertaken by previous explorers highlighted the potential for economic porphyry-style mineralisation at the Thomas Creek Prospect. Work undertaken by previous explorers included geochemical soil surveys, gradient array and dipole-dipole Induced Polarisation (IP) surveys and reconnaissance drill testing. Review of the IP surveys undertaken by Plutonic in 1996 suggested a poor survey configuration for identifying deeper mineralisation and that the data was only of moderate quality. Consequently Sherlock undertook additional dipole-dipole IP surveys on a larger more regional extent in order to identify possible disseminated sulphide mineralisation not tested by existing relatively shallow drill holes.

2.3.1 Survey logistics

An existing timber helicopter landing pad at Thomas Creek was restored to operation and a fly camp was established on higher ground nearby. Potential survey traverse locations were investigated and 10.5 km of line cutting was undertaken.

During March-April, 7.3 line km of dipole-dipole IP surveys were undertaken by Zonge Engineering on four traverse lines. Survey specifications are shown in Table 2 and the survey logistics report is supplied in Appendix 1. Data is supplied in Appendix 2 (digital file only).

Prospect	Remote Transmitter	Receiver Line	Start			End			Orientation (True)	Line length* (kms)	Data points**
			Local	UTM		Local	UTM				
				Easting	Northing		Easting	Northing			
Thomas Creek	1	369100E	5500	369108	5285498	7400	369100	5287400	0	1.9	309
Thomas Creek	2	369700E	5300	369706	5285292	7200	369700	5287200	0	1.9	336
Thomas Creek	2	370000E	5200	370000	5285200	7000	369971	5286996	0	1.8	304
Thomas Creek	2	5286000N	8800	368797	5285992	10500	370489	5286005	090	1.7	272
Total line kilometers / data points:										7.3	1221

* Line length is taken from maximum extent of electrodes.

** Number of data points after averaging and editing

Table 2: Thomas Creek Dipole-Dipole survey configuration

2.3.2 Results and interpretation

The IP Survey defined a distinct chargeability anomaly of significant dimensions (Figure 7). The anomaly is visible on three of the four survey lines completed and is at least 300m W-E by 500m N-S. Modelling of the IP data indicates that the top of this large chargeability feature lies at depths of between 100m and 200m below surface and has not been tested by previous drilling.

A second separate chargeable feature has also been partly identified from the IP and is associated with a second zone of copper soil anomalism on the north-western edge of magnetic ring feature offering further potential and warrants further follow-up.

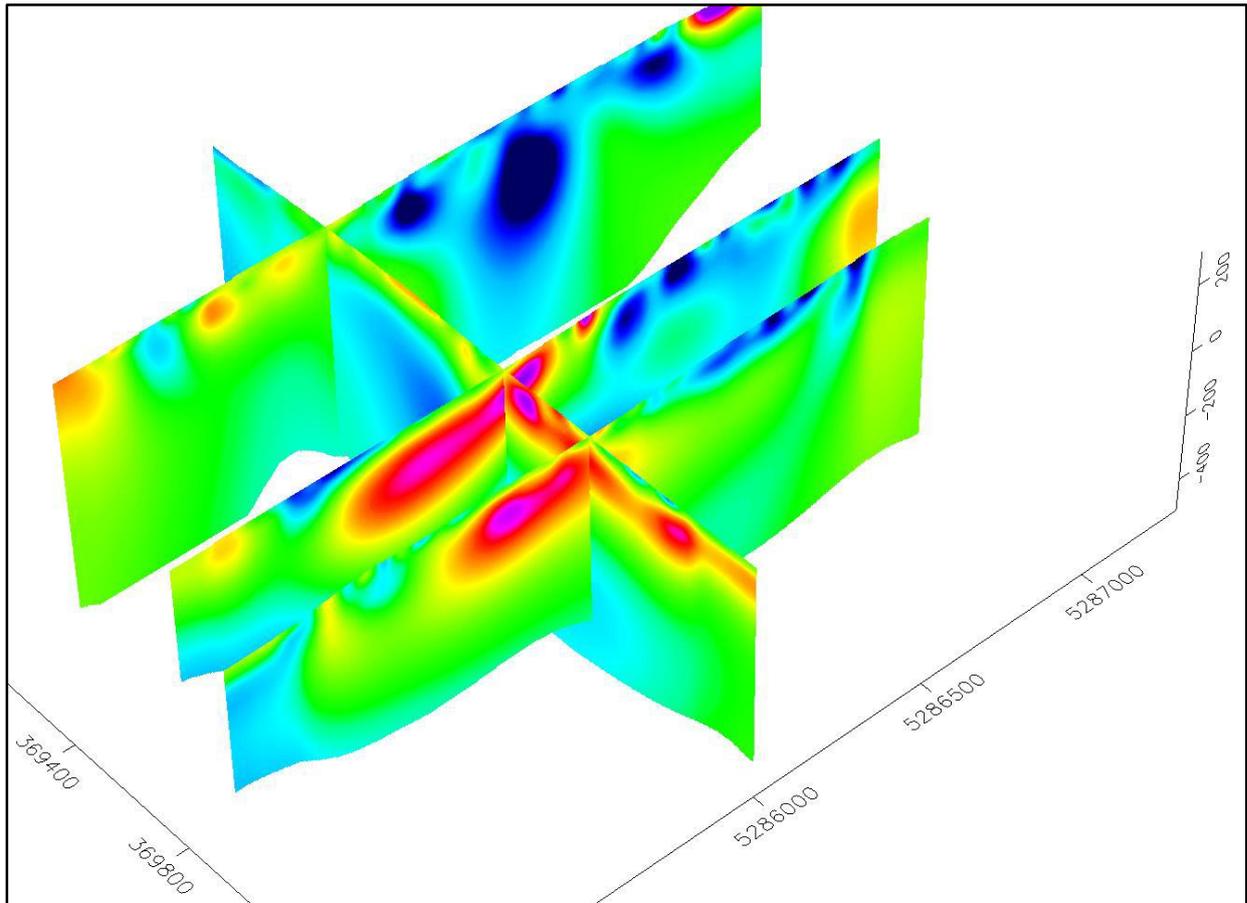


Figure 7:IP inversion model showing large chargeable target (red and magenta colours)

3D modelling of the target highlights the spatial relationship between the chargeability anomaly within the demagnetised zone and lying beneath the surface geochemical copper anomaly (Figure 8). This target warrants immediate drill testing.

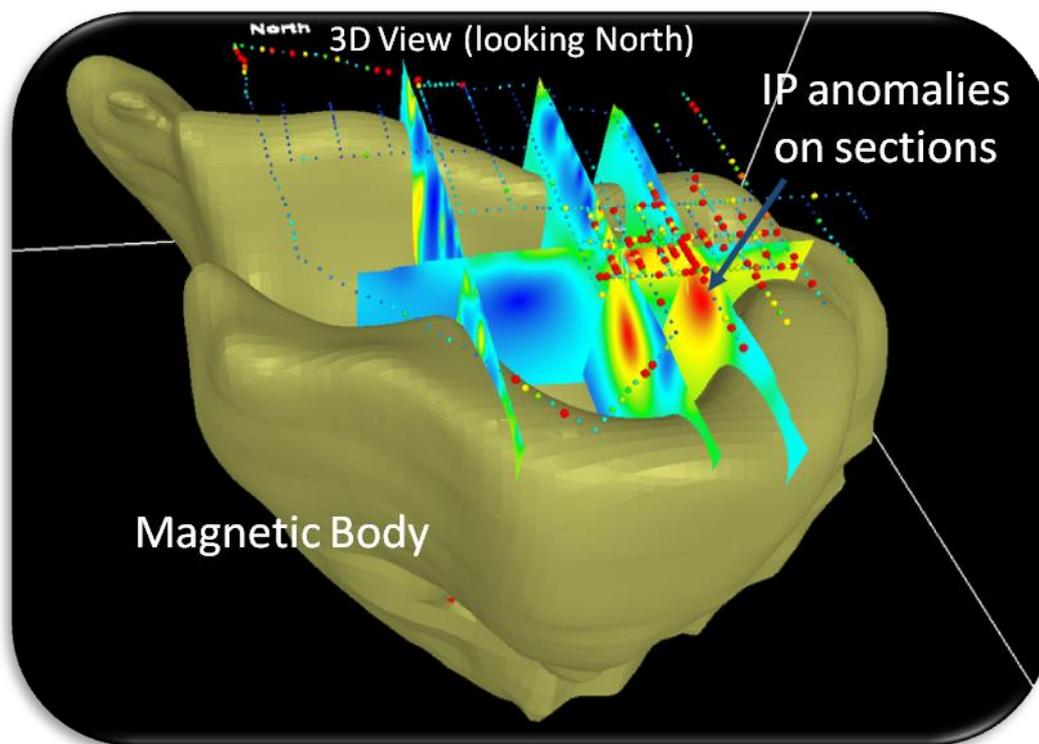


Figure 8: 3D model showing chargeable target, ovoid magnetic rim surrounding demagnetised core and copper in soil anomaly (point data)

2.4 Field reconnaissance, soil and rock chip sampling.

Field reconnaissance visits were undertaken to priority geophysical and geological targets in the Thomas Creek, Henrietta and Hill 99 areas (Figure 9). To assist with target evaluation XRF analysis of rock chip and in-situ soil samples was undertaken using a portable Niton XRF analyser. For soil sampling, at each location the upper 10-30cm of material was excavated and any remaining large rock chips removed. An XRF analysis was undertaken through a protective thin plastic sheet at the exposed soil horizon for thirty seconds. The hole was then backfilled. The Niton reported assays for Mo, Zr, Sr, U, Rb, Th, Pb, Se, As, Hg, Zn, Cu, Ni, Co, Fe, Mn, and Cr at varying detection limits depending on factors including soil moisture content and soil matrix. Ninety seven readings were taken. Results are provided in Appendix 3 (digital file only).

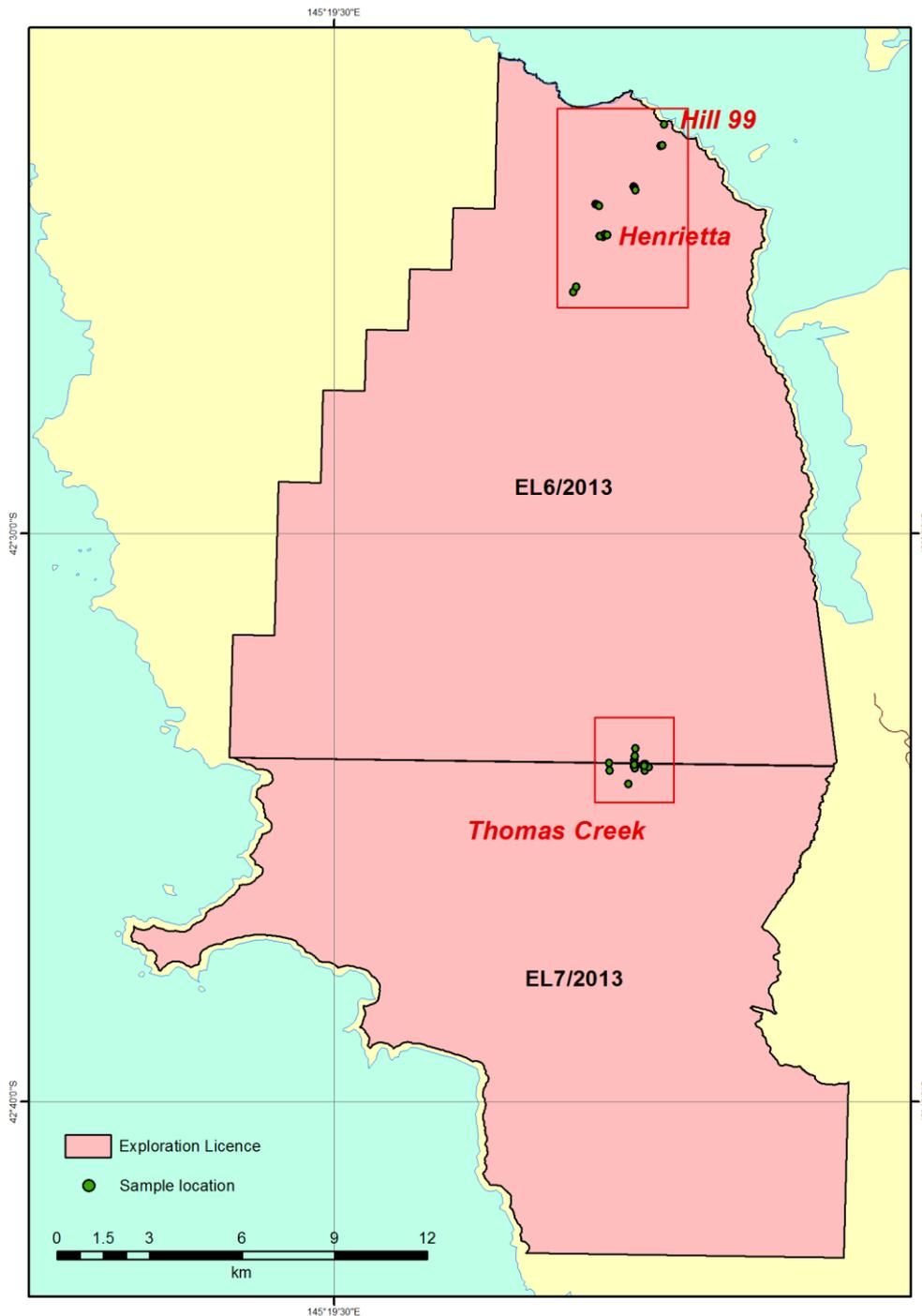


Figure 9: Sample locations – regional

2.4.1 Thomas Creek area.

Fifty-nine XRF readings were taken from the Thomas Creek area, generally along lines cut for IP survey work (Figure 10). Soil samples were undertaken to verify high copper in soils noted by previous explorers. Readings proved to be somewhat erratic, but were generally

elevated in copper (over 100ppm) and include some exceptional results the best recording 5.5% Copper.

As part of the geochemical compilation into a GIS format, it was recognised that the historical soil sample and drill locations were in error (15-35 metre error) to that original recorded. Some of the historical Thomas Creek drill collars have been relocated on the ground and these control points were used to estimate the error and update soil survey and drill locations accordingly.

Late in the reporting period, with the corrected data, Sherlock was able to re-locate the site of the original exceptional high soil copper samples from the Plutonic soil survey. Niton analysis of saprock below soils returned copper values upto 5.5% Cu at this locality. Abundant sulphide is present in the sap-rock samples, with visual analysis indicating pyrite, bornite, chalcopyrite and possibly covellite. Highly weathered remnant host rock is present and it is apparent the mineralisation is occurring in complex vein array. Geochemical testing and petrological work are underway.

2.4.1 Henrietta/Hill 99 area.

Thirty-four XRF readings were taken from the Henrietta / Hill 99 area, following up on targets generated from the reprocessing of historical airborne EM surveys as well as samples undertaken by previous explorers (Figure 11). Access to the sites required 4.5 km of line cutting of an old BHP exploration road from a landing point in the Noddy Creek area.

Significant nickel anomalism was noted at the easternmost extent of a traverse across the centre of the Henrietta EM target, with one gossanous rock chip sample returning 0.45-0.63% nickel.

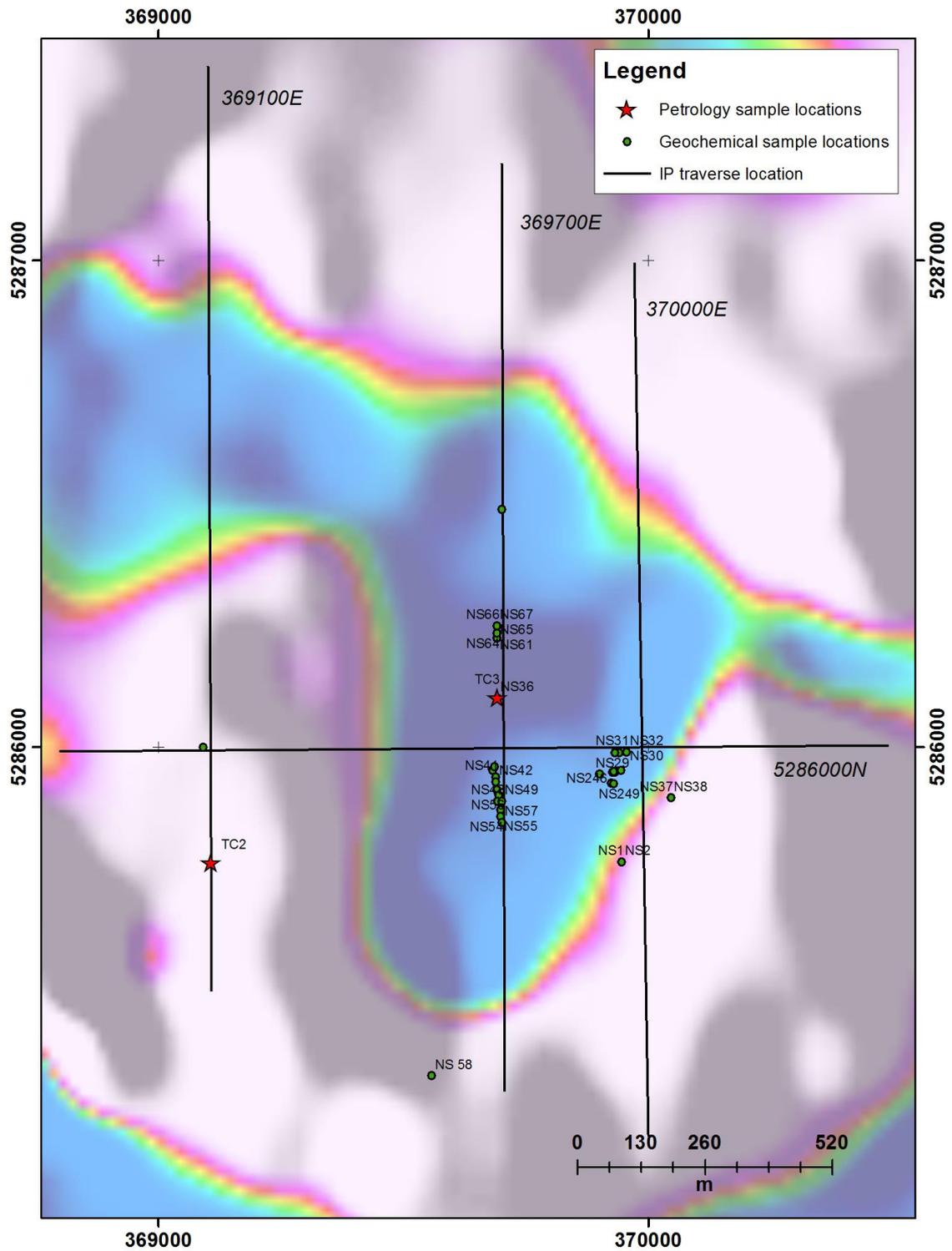


Figure 10: Thomas Creek Prospect, IP traverse and geochemical sample locations over IVD aeromagnetic image

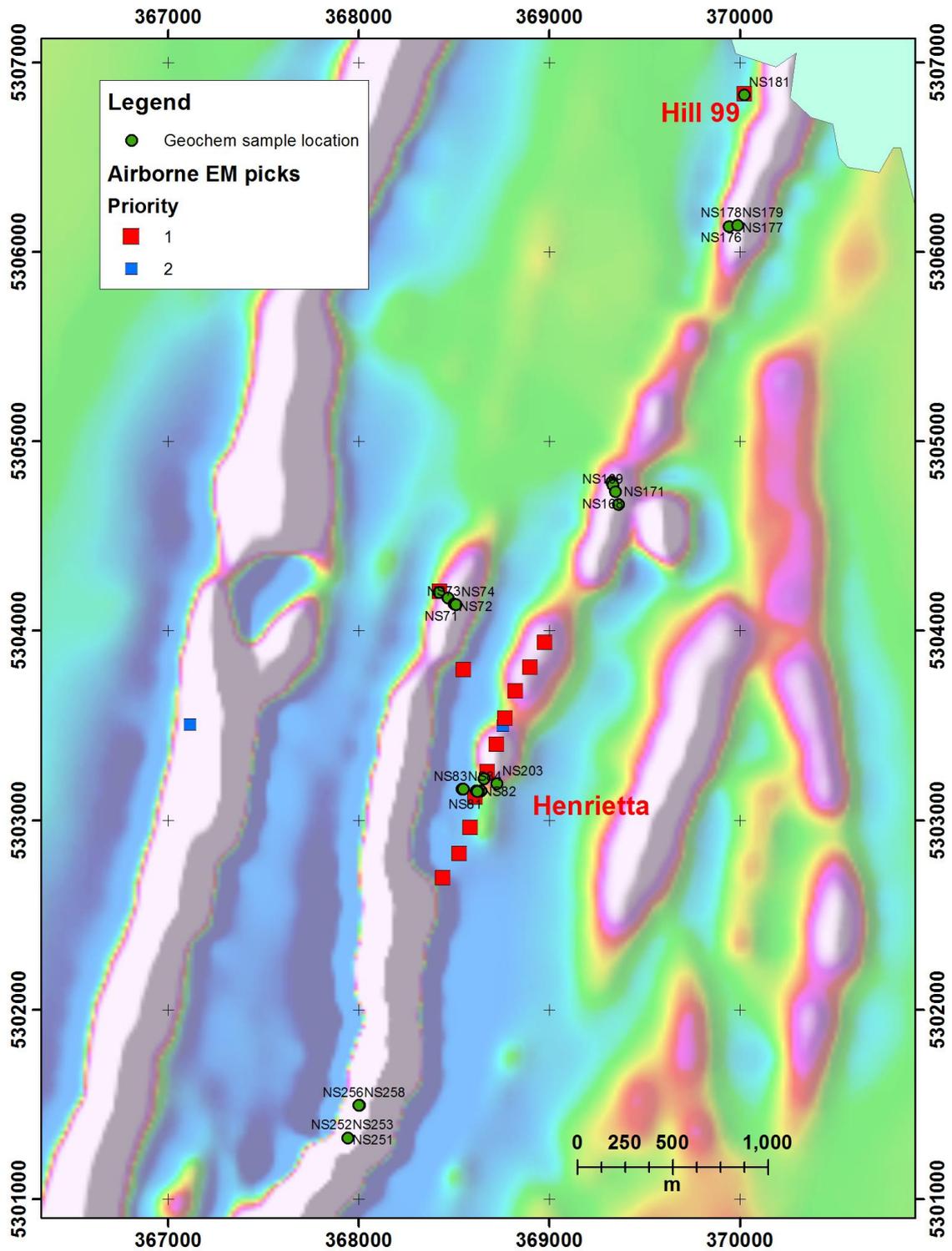


Figure 11: Henrietta / Hill 99 area, geochemical sample locations and airborne EM targets over IVD aeromagnetic image

2.4 Petrological studies.

Rock chip samples from minor outcrops at Thomas Creek were submitted for petrological analysis by Pontifex and Associates. Sample TC2 (location 369107E, 5285763mN) was of unaltered gabbro marginal to the main altered zone at Thomas Creek (Figure 8) and sample TC3 (location 369691E, 5286102mN) was of strongly sericitic altered material within the main alteration halo. Sample TC3 was described as a fine-grained, massive microtonalite (or intrusive dacite?) extensively altered and composed mainly of sericite, clay & limonite with minor pyrite within quartz-filled miarolitic cavities, and in possible vein-quartz. The petrological report is supplied in Appendix 4.

3. CONCLUSIONS

At the Thomas Creek Prospect IP surveys revealed the presence of a significant chargeability anomaly approximately 300 m wide (open) and 500 m long at 100-200m depth. This does not appear to have been tested by historical exploration drill holes and is strongly recommended for drill testing.

Soil geochemical work at Thomas creek indicates highly weathered sap rock occurs below dark soils generally at 40 centimetres to 60 centimetres depth. It is interpreted the high rainfall environment may have leached much of the surface copper mineralisation. Narrow zones with higher copper values are always associated thicker sets of remnant vein material. This may explain why the chargeable anomaly starts at 100-200m depth indicating the depth of oxidation.

Importantly the high copper vein material, near the surface is deeply weathered and would be easily washed out using standard diamond drilling methods. This may account for relatively low copper values returned by the historical shallow Plutonic drilling, and indeed was noted as a possible factor with poor core recovery. Another critical factor may be that the vein sets may be running approximately north-northeast and this is almost parallel to the direction of the drilling.

Within the Hibbs Ultramafic Belt, reprocessing and interpretation of historical airborne electromagnetic survey data identified a high amplitude conductive target, 'Henrietta',

approximately 1.3 km in strike length. Preliminary field investigations at Henriettea located gossanous material with elevated nickel and platinum assays. A program of rock chip sampling and ground EM surveys is recommended for this prospect ahead of drill testing.

Within the Mount Read Volcanic equivalent strata, reprocessing and interpretation of historical airborne electromagnetic survey data has identified numerous conductive targets warranting field reconnaissance and ground EM follow-up.

4. ENVIRONMENT

Prior to any field-based activities being undertaken, the appropriate PEWPS were submitted to Mineral Resources Tasmania for approval. A species search was undertaken via the online Natural Values Atlas. The search identified observations of six threatened species within the Exploration Licences, including the white-bellied sea-eagle, tasmanian devil, swift parrot, orange-bellied parrot, azure kingfisher, and the tasmanian wedge-tailed eagle. The most significant of these is the orange-bellied parrot which is listed as critically endangered. None of the identified observations were within areas of proposed field activities.

Ground disturbing work within the Sorell Project was limited to cutting access tracks for IP surveys at the Thomas Creek Prospect and for geological reconnaissance and sampling north of the Noddy Creek area. All track cutting was limited to the re-opening of historical exploration access tracks and lines and was restricted to chain-sawing of fallen timbers and brush cutting of regrowth along these lines. Tracks were cut wide enough to allow free walking access in single file, carrying camping gear or survey equipment.

No rehabilitation has been undertaken as all tracks cut are still in use.

5. EXPENDITURE

Total expenditure for activities on ELs 6/2013 & 7/2013 are provided in Table 4.

EL6/2013		EL7/2013	
Item	Total	Item	Total
Geology	\$154,861	Geology	\$154,930
Geochemistry	\$7,564	Geochemistry	\$5,806
Geophysics	\$93,862	Geophysics	\$82,671
Other	\$25,941	Other	\$10,640
Administration	\$27,215	Administration	\$24,571
Total	\$309,442	Total	\$278,618

Table 4: Summary of exploration expenditure, Year 1, Sorell Project.

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APPENDICES

Appendix 1: IP survey logistics report

Appendix 2: IP data (digital file only)

Appendix 3: Evaluation of 2010 VTEM and 1997 GeoTEM results from the Sorell Peninsula

Appendix 4: Sample location data (digital file only)

Appendix 5: Niton XRF analyses (digital file only)

Appendix 6: ICP geochemical analyses (digital file only)

Appendix 7: Petrological report

APPENDIX 1

IP survey logistics report



Zonge Engineering and Research Organization (Australia) Pty Ltd

**Sorell Peninsula
Pole-Dipole Induced Polarisation Survey**

Logistics Summary

March-April 2014

For

Sherlock Minerals

Compiled by:

S. Mann

Report No: 140077

Date : April 2014

Zonge Engineering & Research Organization (Australia) Pty Ltd

39 Raglan Avenue Edwardstown SA 5039

Tel +61 8 83710020 Fax +61 8 83710080

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1. SUMMARY 1
2. IP INSTRUMENTATION 1
3. IP SURVEY PARAMETERS 2
4. PRODUCTION ISSUES AND SUMMARY 3
5. DATA PROCESSING 3
6. EXPLANATION OF FILES 4

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APPENDIX I

Zonge TS2DIP chargeability and resistivity inversion models

APPENDIX II

Job 140077 Production Summary

APPENDIX III

Pre-Survey Client Checklist as completed by Sherlock Minerals

1. SUMMARY

During March - April 2014, Zonge Engineering and Research Organization (Zonge) mobilised a 3-person geophysical field crew to Sherlock Minerals' Thomas Creek prospect within the Sorell Peninsula project in Tasmania to conduct a Pole-Dipole Induced Polarisation (PDIP) survey. Information specific to this survey as provided to Zonge by Sherlock Minerals may be found within the "Survey_Info" folder on the accompanying disc. Pre-survey planning information provided by Sherlock Minerals is presented in Appendix III.

Survey line parameters were provided to Zonge by Peter Reid and Graham Ascough of Sherlock Minerals. During this program 7.3 line kilometres of PDIP were surveyed providing 1221 resistivity and chargeability data points.

Data quality and repeatability were monitored throughout the course of the survey which ensured that the best possible data was acquired given local conditions and time constraints. Raw data direct from the field was sent to Zonge's Adelaide office for processing and modelling. Raw and processed results were sent to Graham Ascough for interpretation.

2. IP INSTRUMENTATION

A GDD GRX-32 IP receiver was used to take all of the data for this project. Data was recorded using specialised multi-conductor receiver cables allowing each line to be read from a fixed 16-dipole receiver array. Porous ceramic pots filled with copper sulphate were used as non-polarisable receiver electrodes.

Transmitted fields were generated using a GDD TXII geophysical transmitter at 0.125 Hz. Signal frequency was controlled internally by the transmitter; synchronisation was automatically detected by the GDD IP Receiver. Remote transmitter electrode was constructed by lining pits with foil and back filling with soil and salt water. Stainless steel stakes were used as roving transmitter electrode.

The raw data from each day was downloaded every evening from the PDA used with the receiver to a laptop computer for review by the Crew Leader in the field. The satellite communications system used by Zonge did not function in the dense forest of the camp so data was not reviewed by Zonge office or client staff during the survey. Review, processing and modelling were performed in Zonge's Adelaide office after crew returned. The resulting raw, processed and inverted data were provided to Graham Ascough and Peter Reid of Sherlock Minerals.

3. IP SURVEY PARAMETERS

All data recorded during this survey was taken at a frequency of 0.125 Hertz. During acquisition chargeability data was recorded over 20 time windows after an initial delay of 40ms. A semi-log window scheme was used to record decay data over the 2000ms off-time. Stack size was varied depending on signal strength and number of repeat stacks was adjusted in the field to balance survey speed with data quality. Generally output transmitter currents ranged from 1.5 to 3.5 Amps due to the resistive conditions.

Two remote or “infinite” transmitter electrodes were used during this survey. Remote transmitter locations were selected based on the furthest possible location on the accessible tracks from the line being surveyed. Lines were surveyed using the following remote transmitter electrode locations:

Remote site 1: 370477mE / 5286032mN

Remote site 2: 368714mE / 5287389mN

Actual and truncated UTM coordinates in GDA94 z55 were used for both line and station numbers respectively; for each line these coordinates are shown below in Table 1. Full UTM coordinates for each line are stored in the .stn text files accompanying the data with this report.

Table 1 Survey line specifications

Prospect	Remote Transmitter	Receiver Line	Start			End			Orientation (True)	Line length* (kms)	Data points**
			Local	UTM		Local	UTM				
				Easting	Northing		Easting	Northing			
Thomas Creek	1	369100E	5500	369108	5285498	7400	369100	5287400	0	1.9	309
Thomas Creek	2	369700E	5300	369706	5285292	7200	369700	5287200	0	1.9	336
Thomas Creek	2	370000E	5200	370000	5285200	7000	369971	5286996	0	1.8	304
Thomas Creek	2	5286000N	8800	368797	5285992	10500	370489	5286005	090	1.7	272
Total line kilometers / data points:										7.3	1221

* Line length is taken from maximum extent of electrodes.

** Number of data points after averaging and editing

4. PRODUCTION ISSUES AND SUMMARY

No incidents were reported by the crew during completion of this survey. Appendix II provides a summary of the production of Job 140077. More detailed information on daily production may be found on the accompanying disc under "*Production Reports*". All safety documentation completed during this survey, including the above mentioned incidents are contained within the "*Safety_Documentation*" folder on the accompanying disc.

5. DATA PROCESSING

Raw data were reviewed at Zonge's Adelaide office to ensure data quality. Raw, edited and processed results were subsequently provided to Peter Reid and Graham Ascough on completion of the survey. Data were imported into a Scientific Computing Applications TQIP database for review and editing. The quality of each block of raw PDIP data was examined before being averaged to create a single record for each data point. Blocks or channels that were considered of poor quality were skipped before averaging each station's data. Chargeability data was recalculated over 590-1540ms integration timeframe. All raw data taken during this survey are included on the accompanying disc so that this data may be re-averaged if necessary.

2D inversion modelling was performed by Zonge for quality control purposes and are presented below in Appendix I. These models are default setting only and Zonge have not modified modelling parameters in order to ensure results are consistent with any preconceived geological models. The topography used in modelling this data is derived from NASA SRTM data.

6. EXPLANATION OF FILES

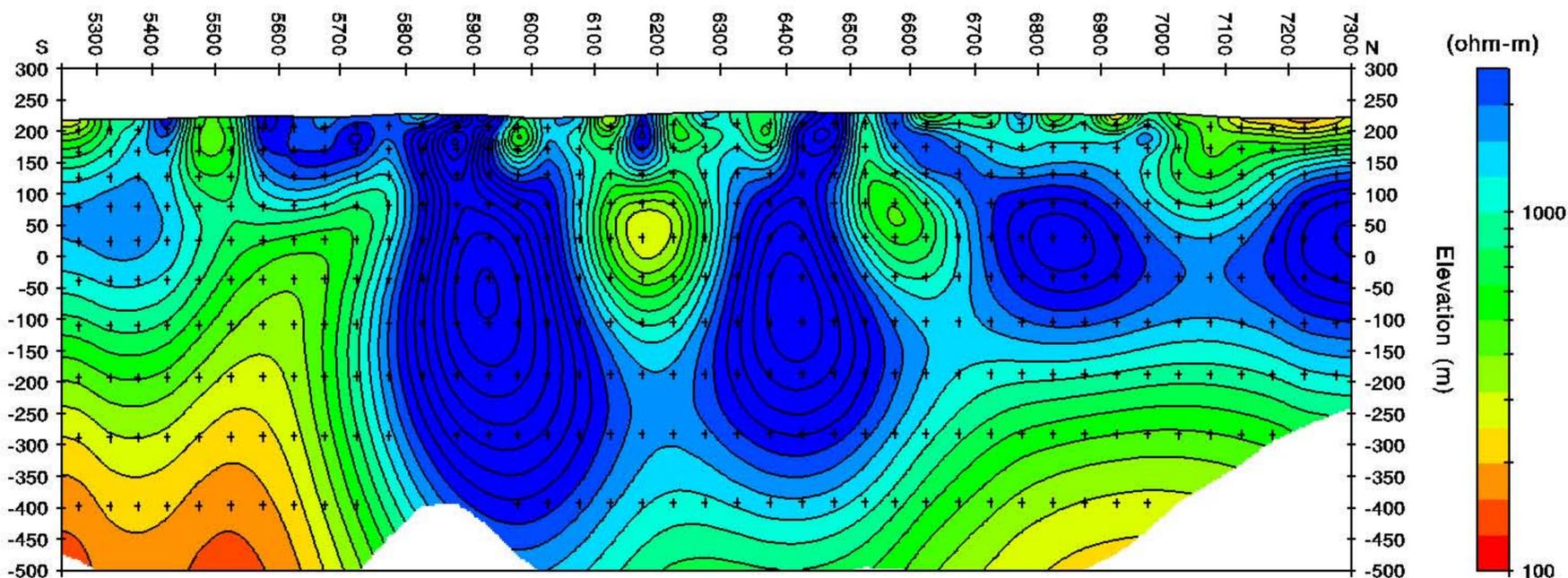
Digital data is provided on CD along with paper plots of the data. Data from each surveyed line are placed in the following directory structure on the accompanying CD: *Processed_Data\line#*. File formats are explained below:

*.DAT	Averaged data file from TQIP containing averaged and edited DDIP data, two varying formats are used for the TS2DIP and RES2DINV inversions
*.MDB	TQIP database file containing all DDIP data.
*.IPM	Inversion model files produced by TS2DIP
.PNG/.BMP	Panel plot files showing modelled, observed and calculated data
*.GDD	The edited raw data downloaded from the GDD receiver.
*.STN	Station co-ordinate files containing station number, easting, northing and elevation.

APPENDIX I

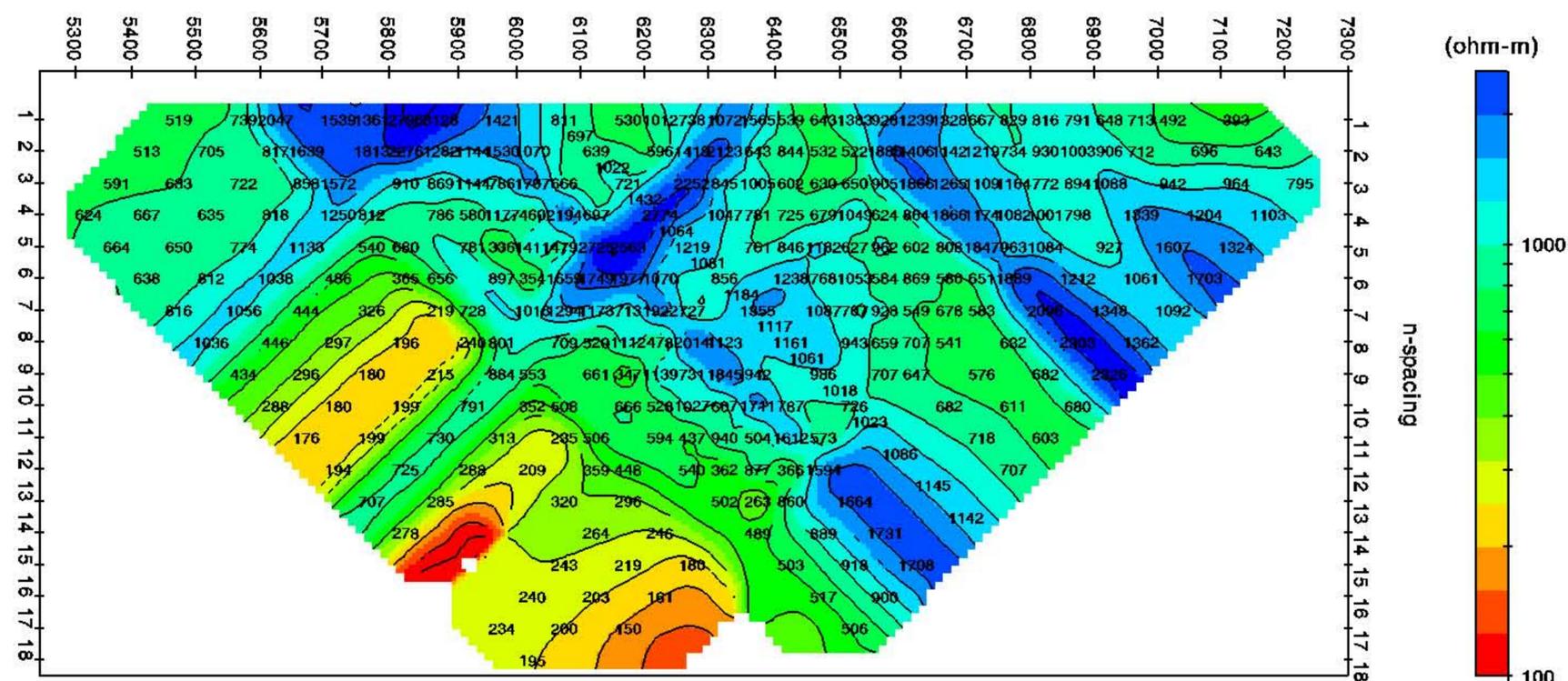
2D chargeability and resistivity inversion models

Resistivity Inversion Model



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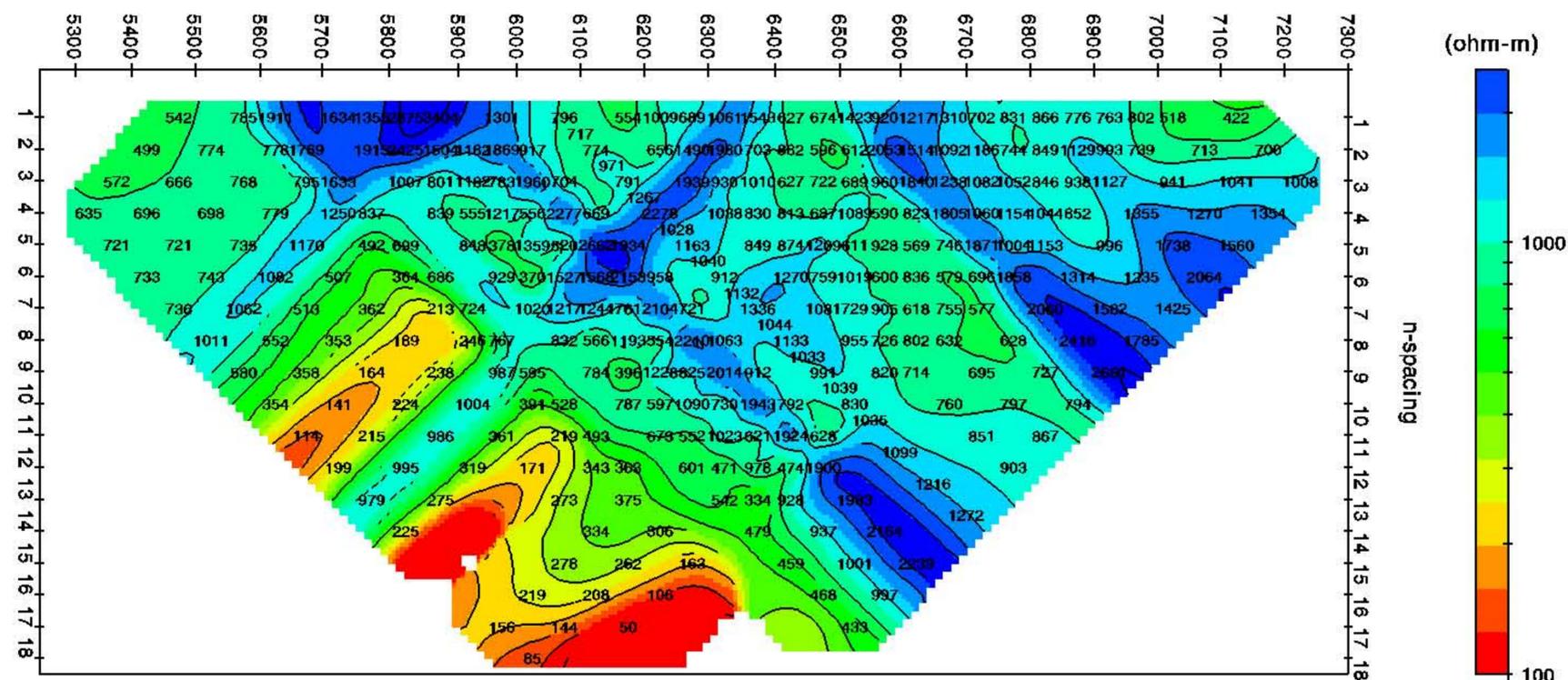
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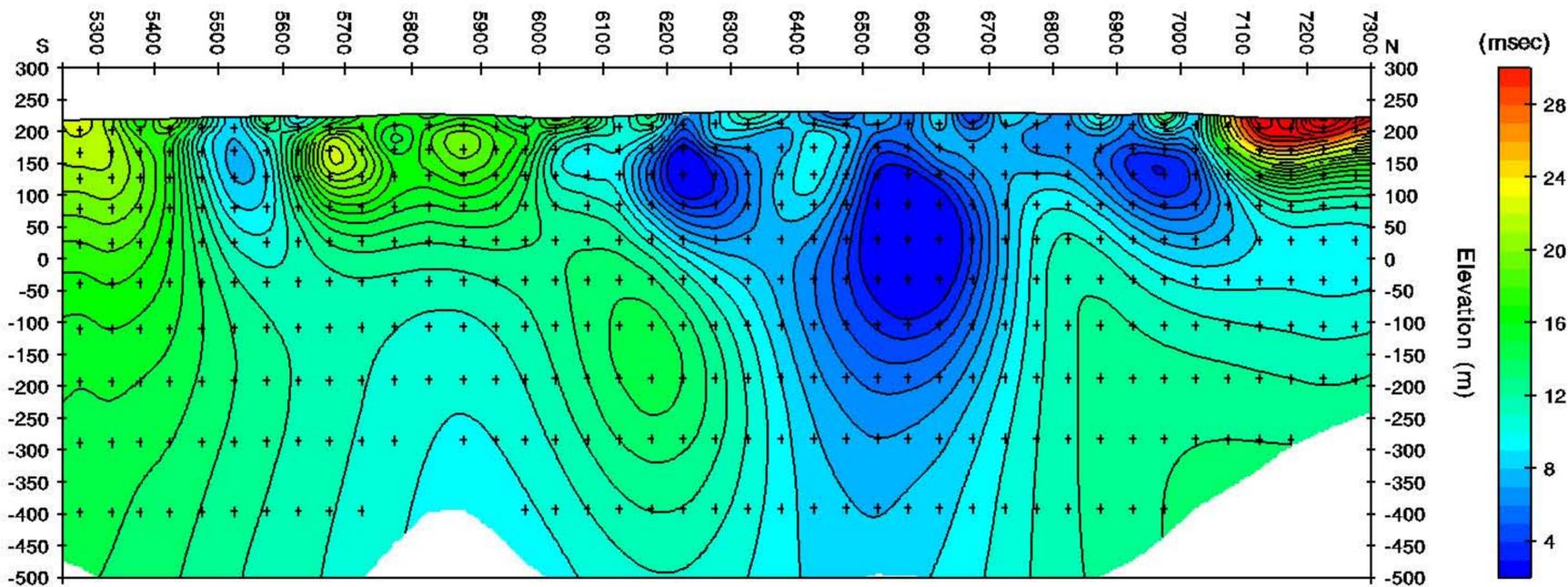


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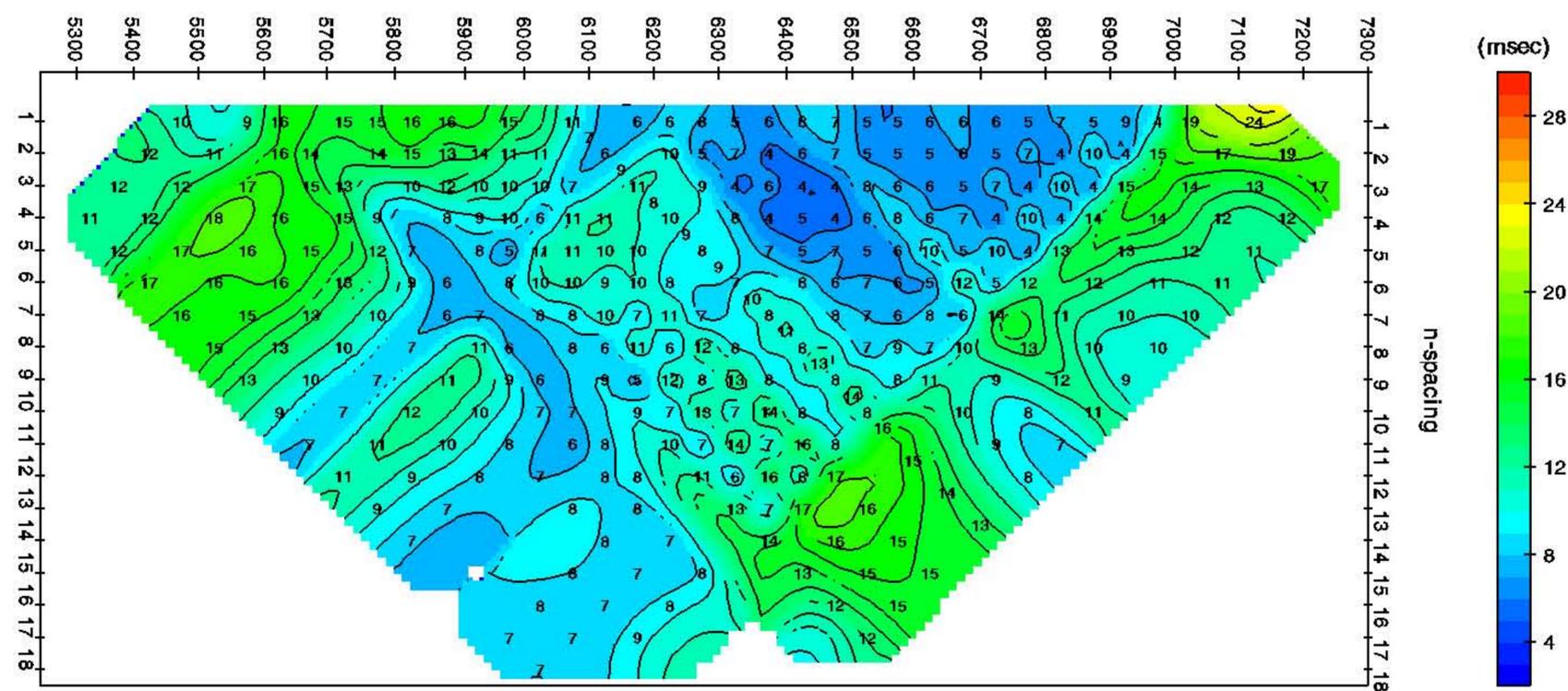
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IP Inversion Model



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Line 369100E

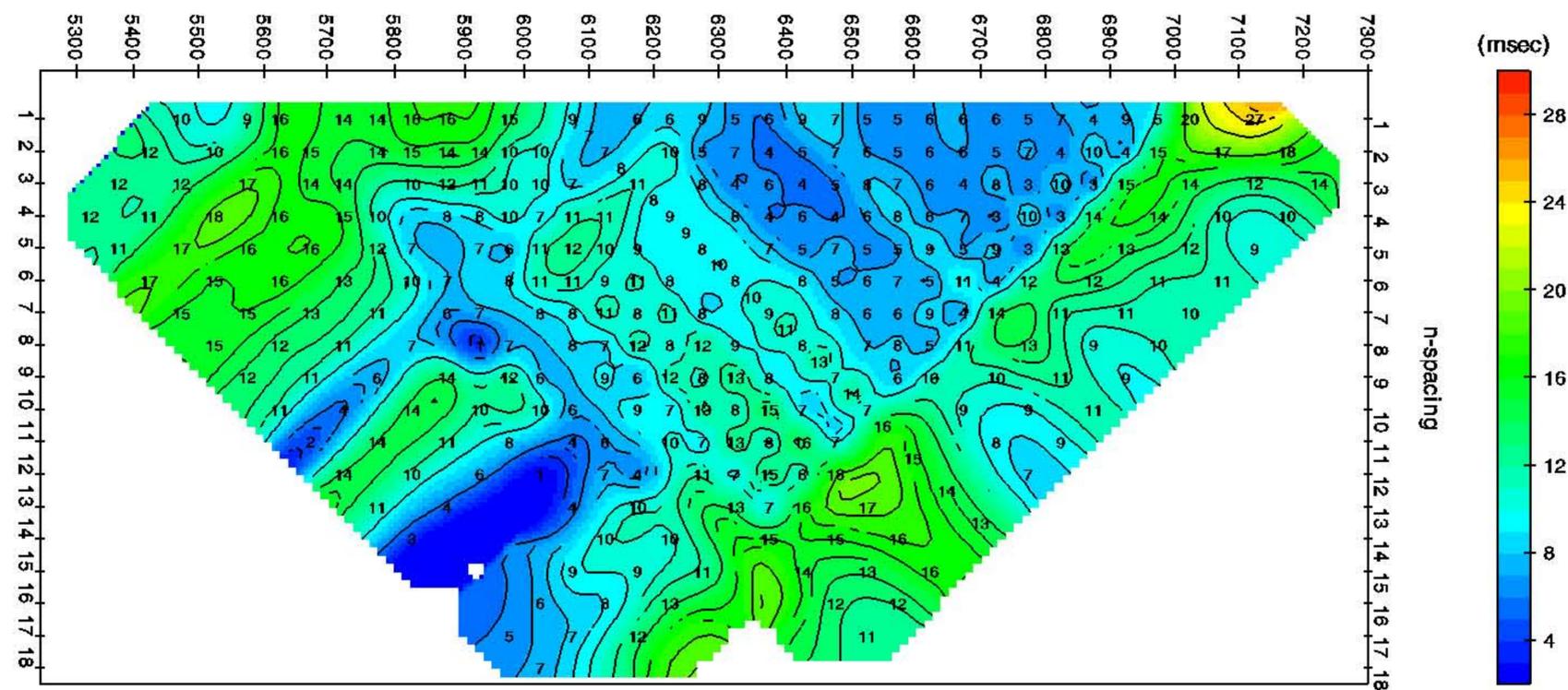
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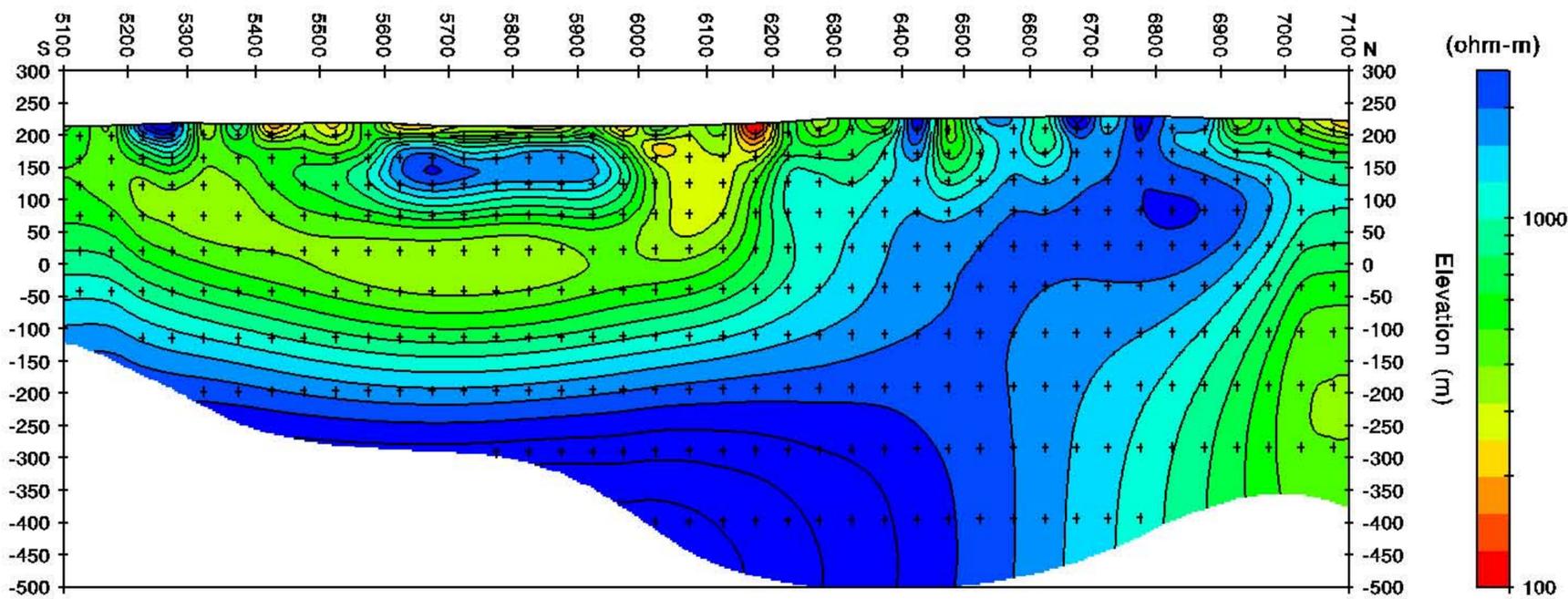


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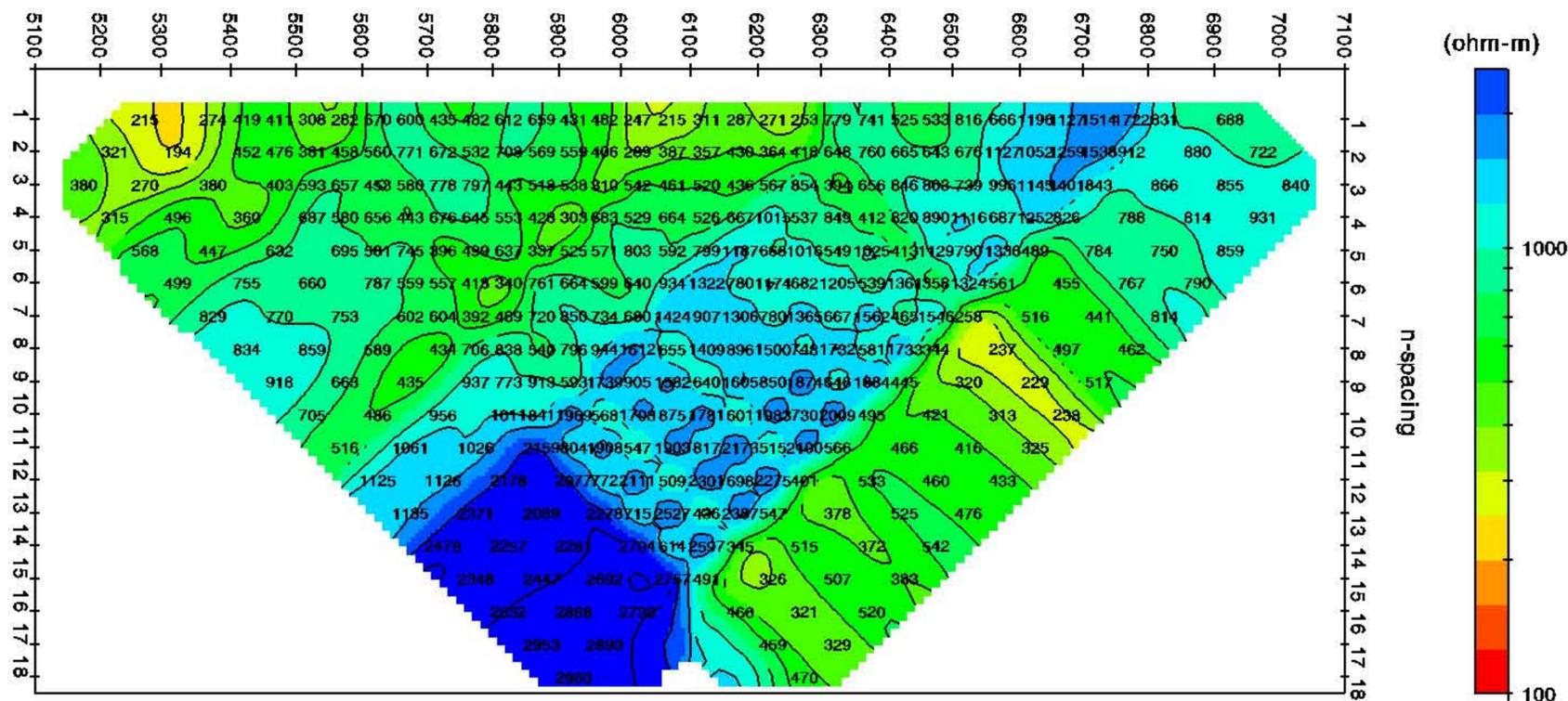
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Resistivity Inversion Model



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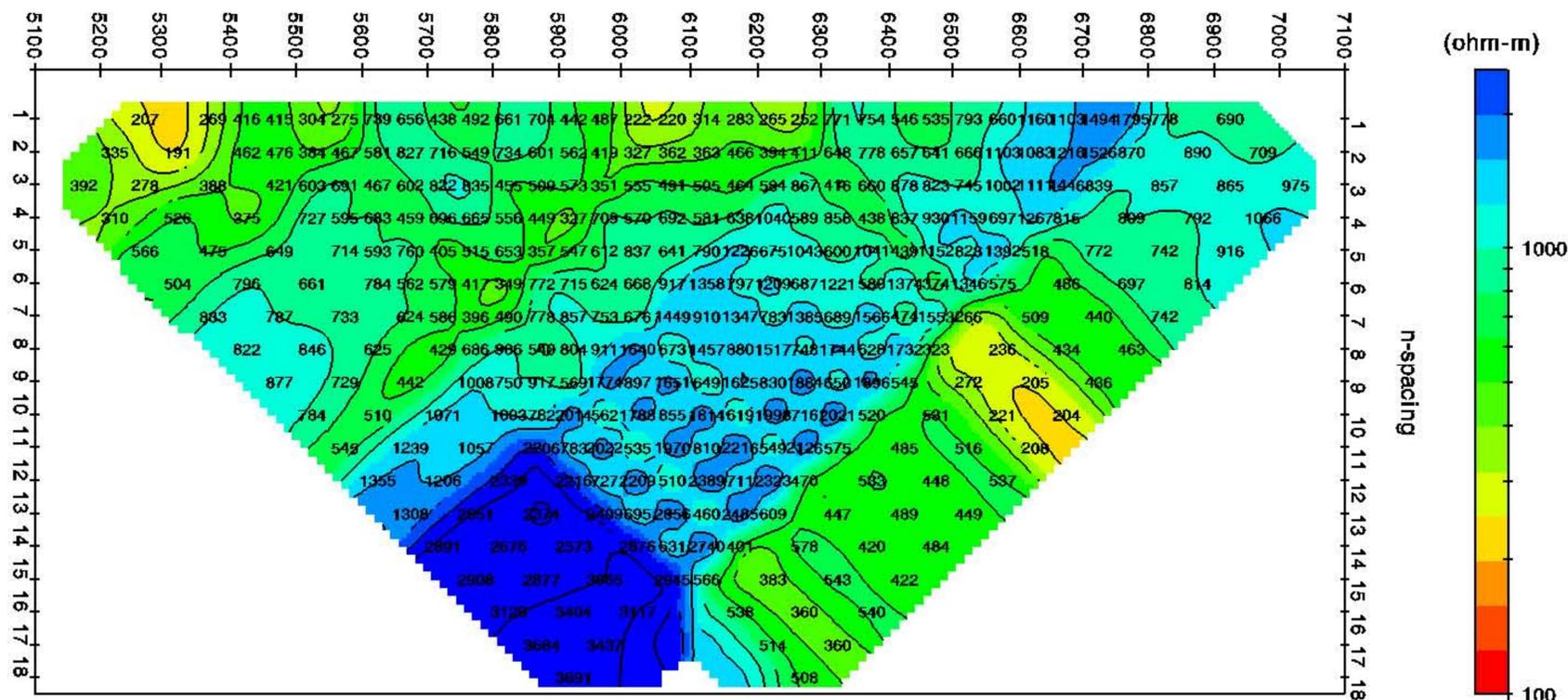
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TS2DIP v4.70e

Resistivity Observed Data

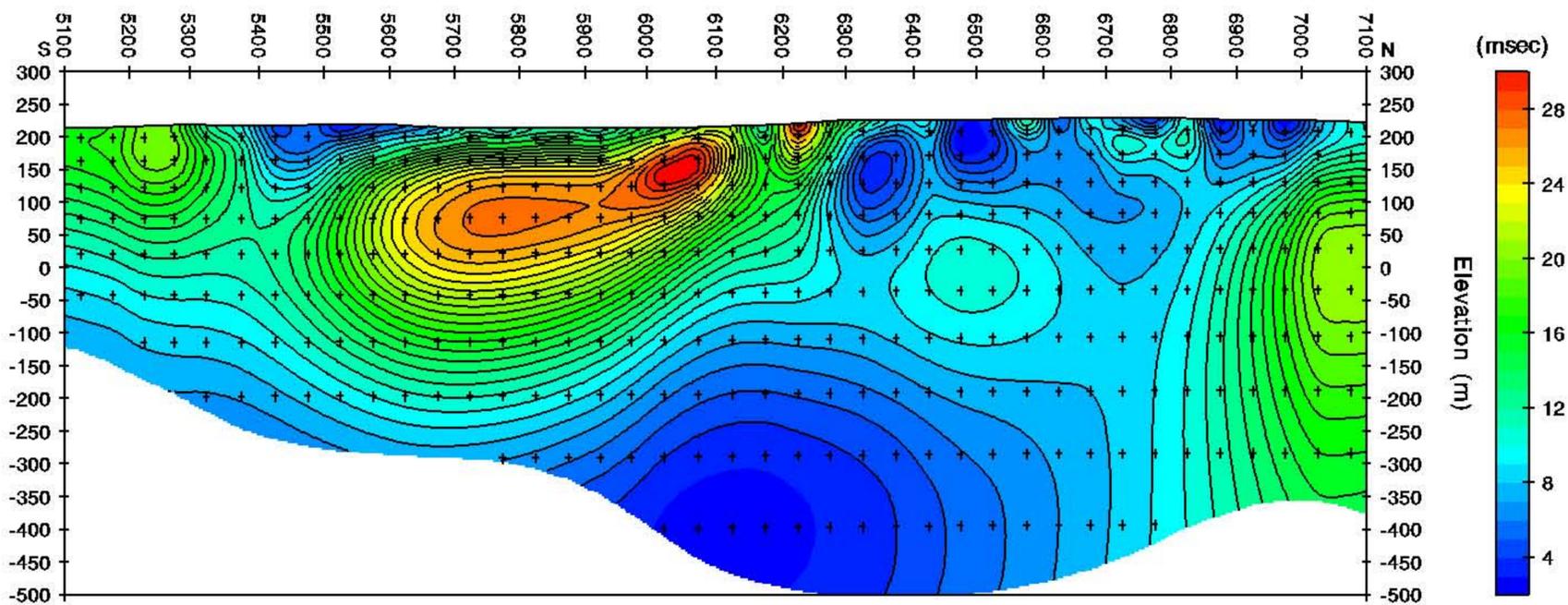


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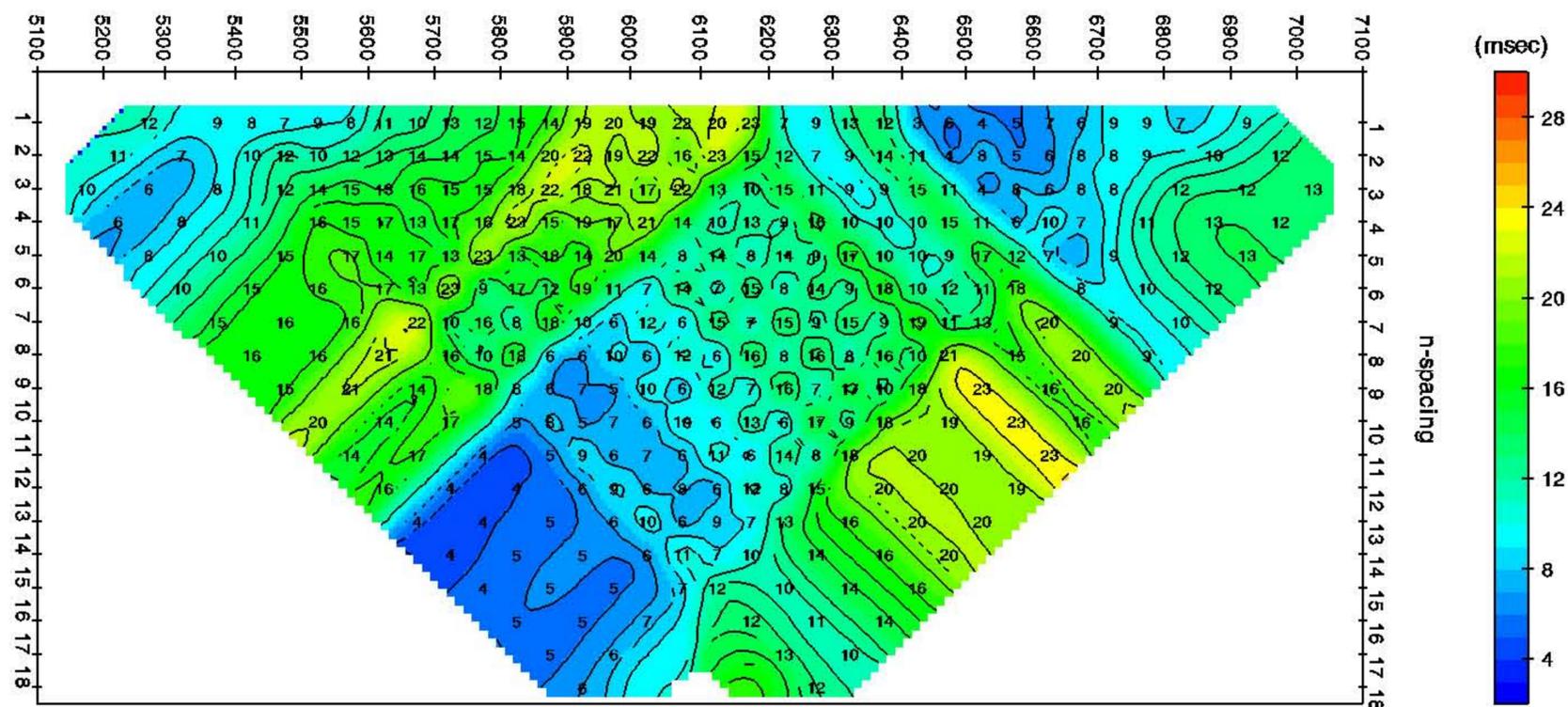
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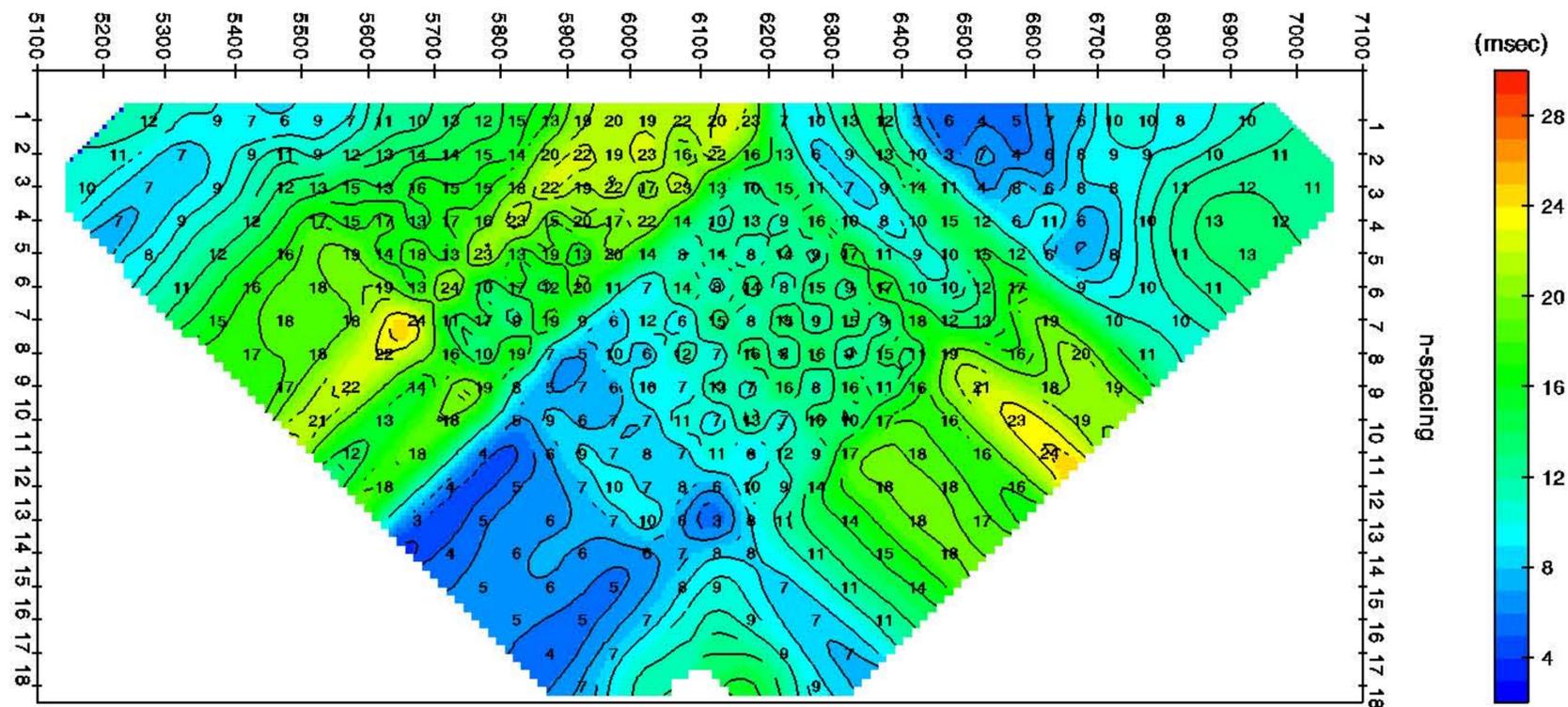
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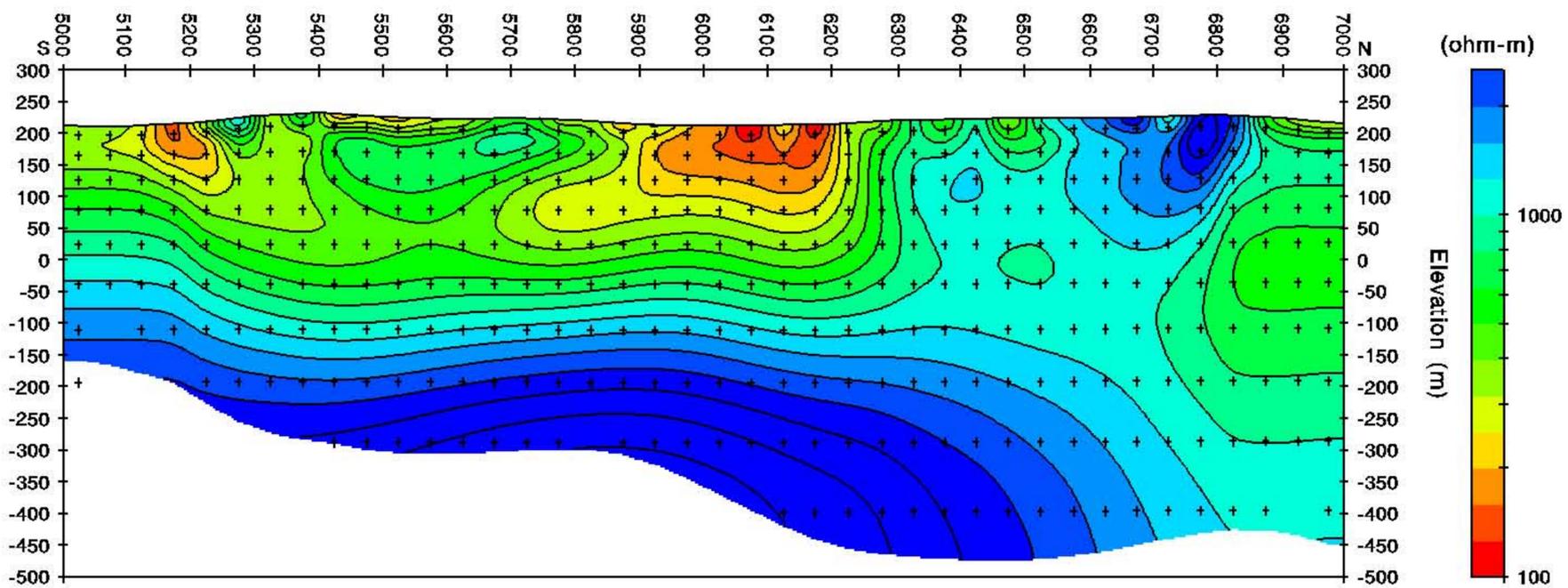


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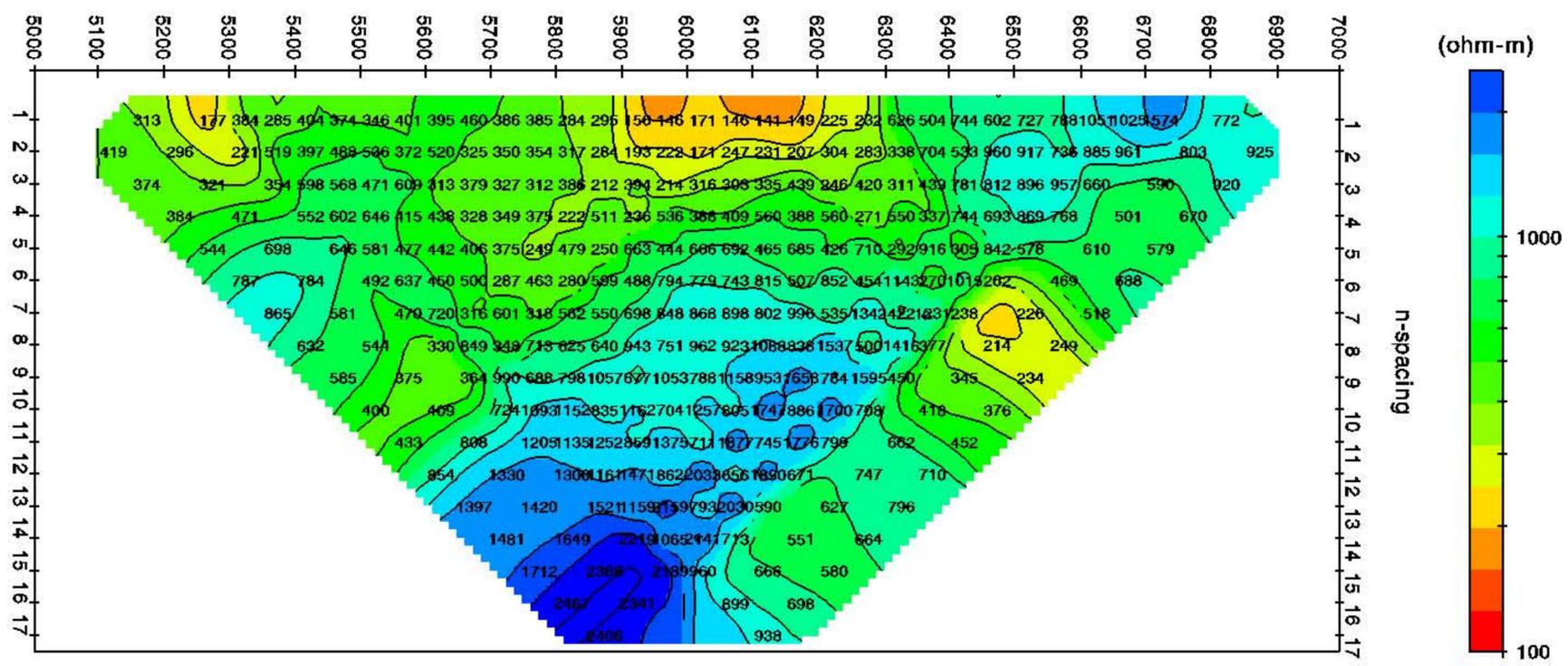
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Resistivity Inversion Model



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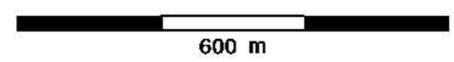
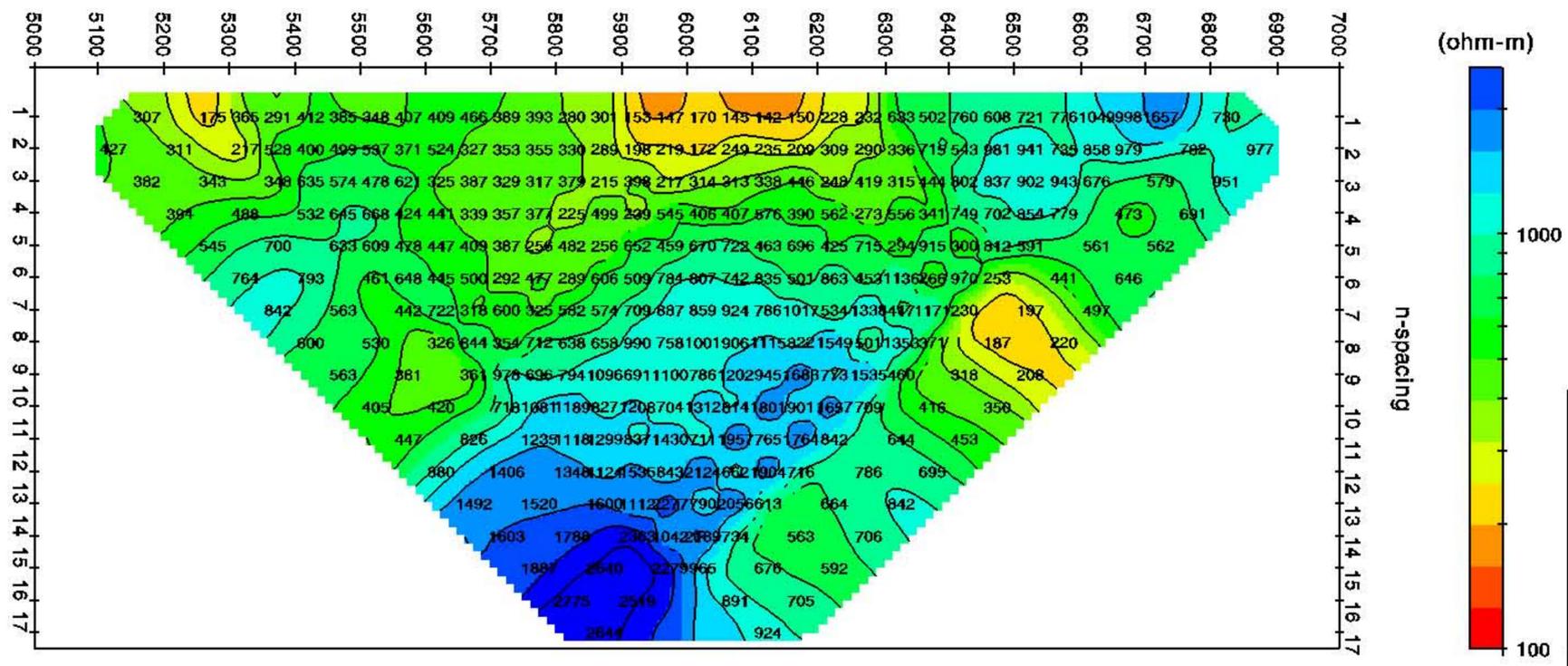
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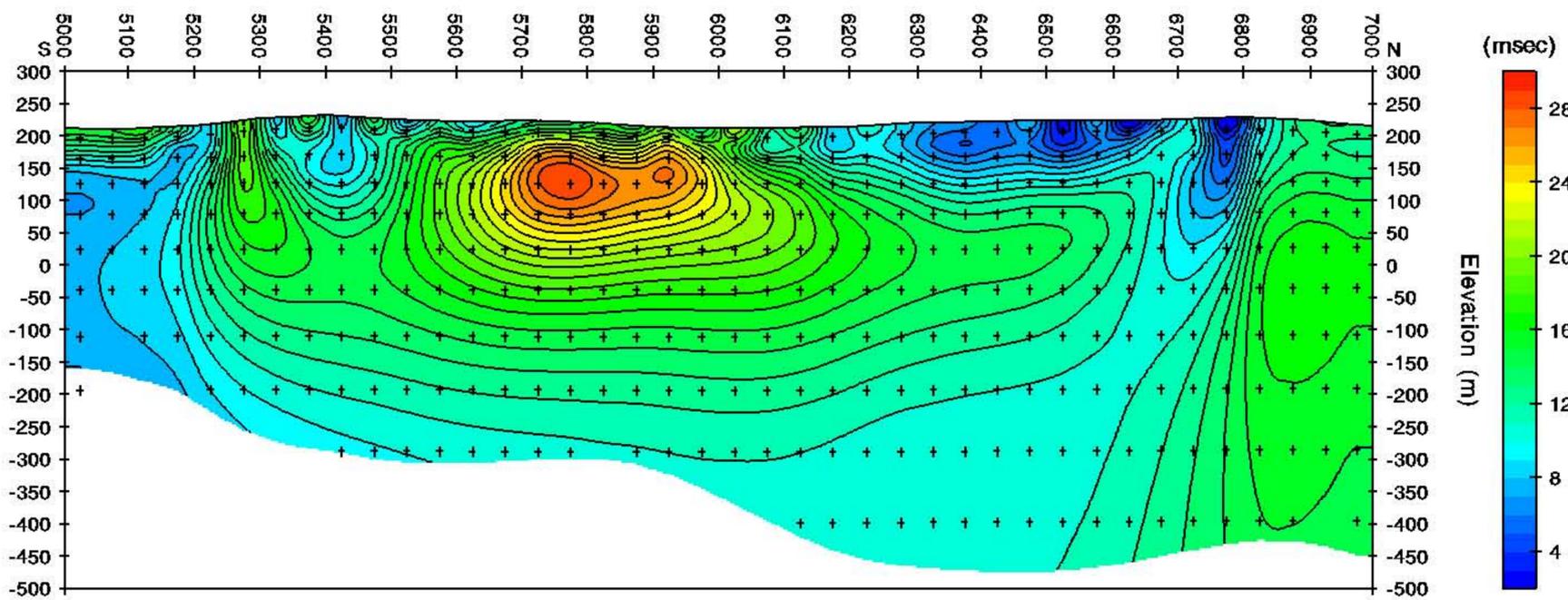


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Line 370000E
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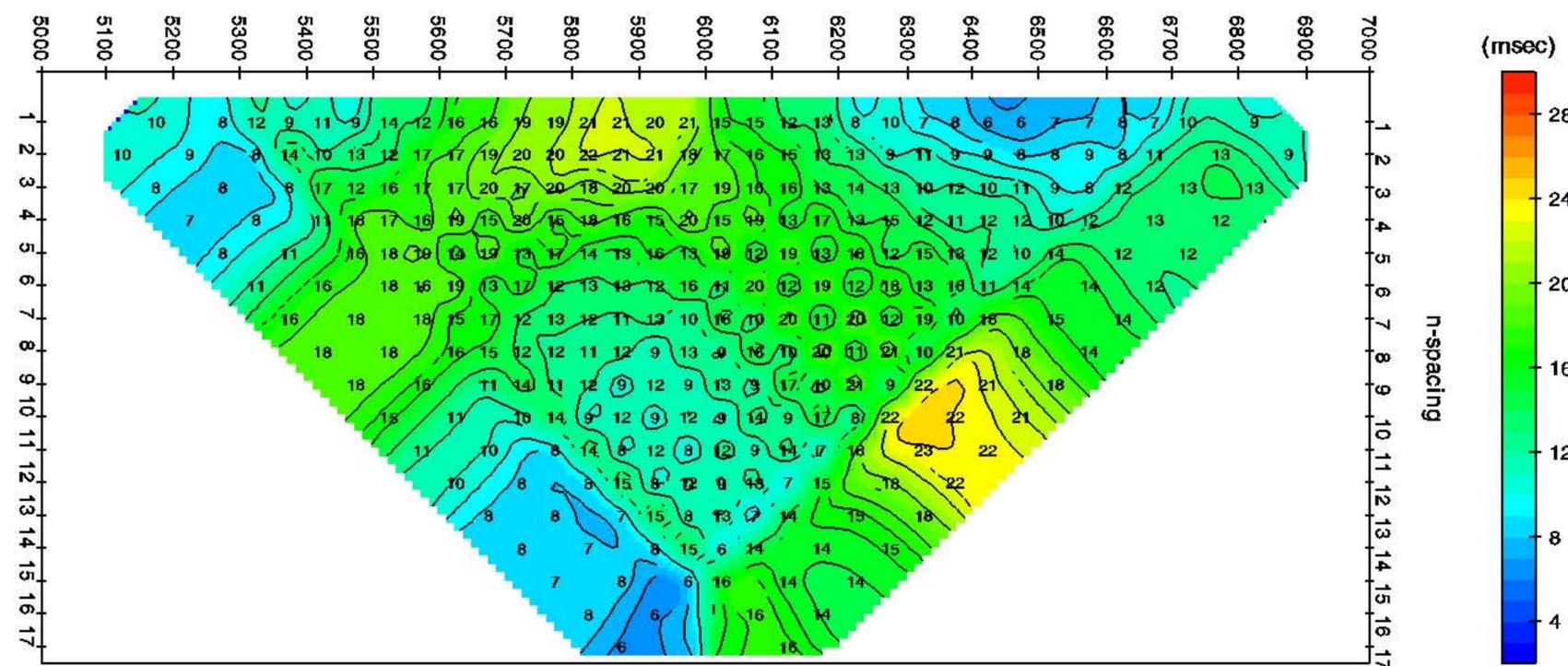
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IP Inversion Model



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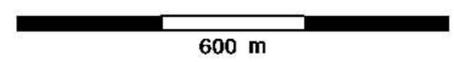
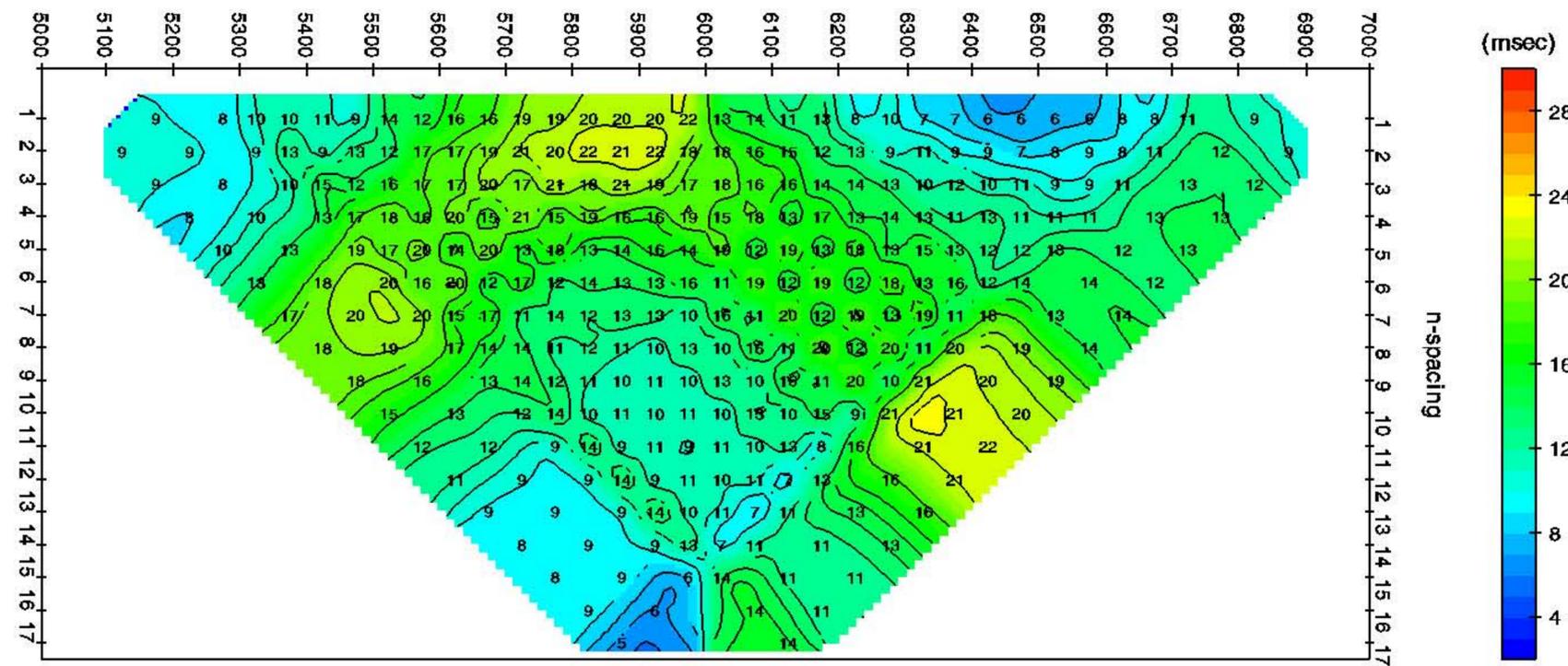
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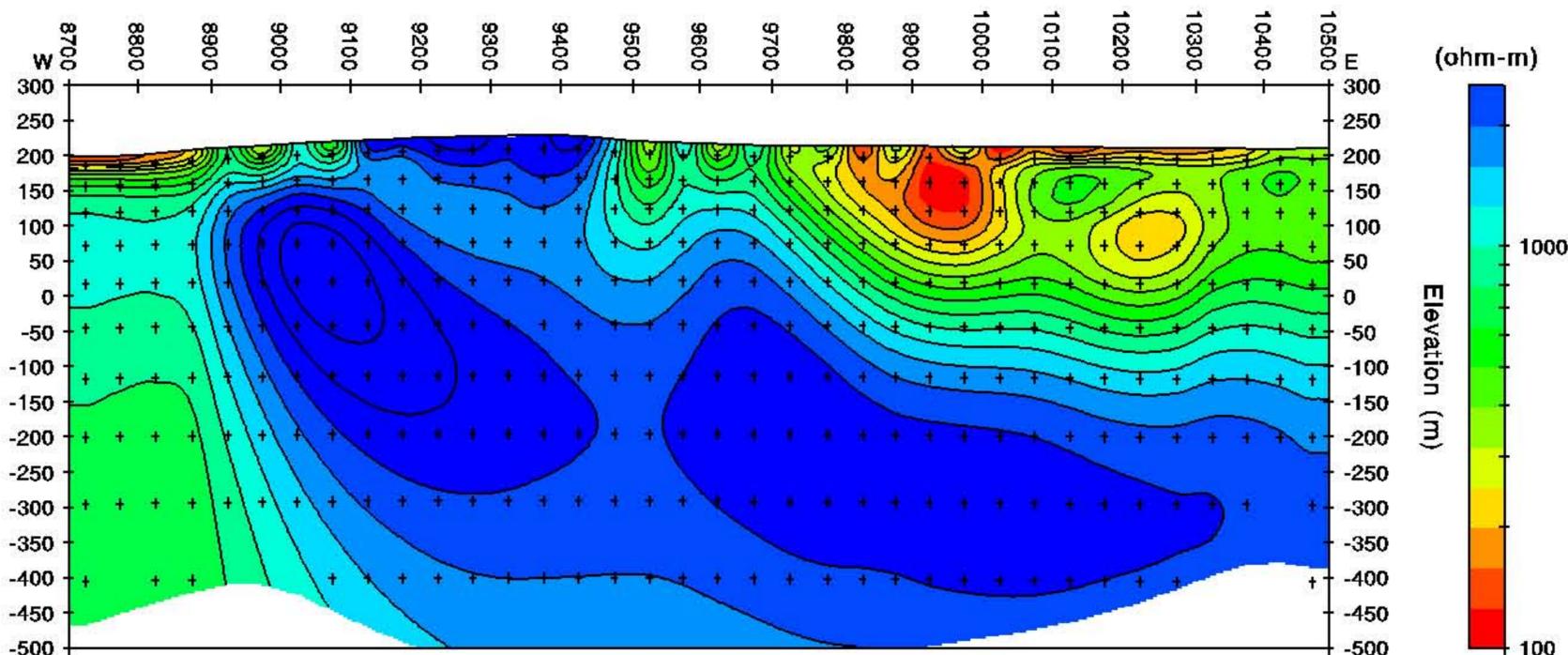


Sherlock Minerals
Thomas Creek
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Pole-Dipole IP Data

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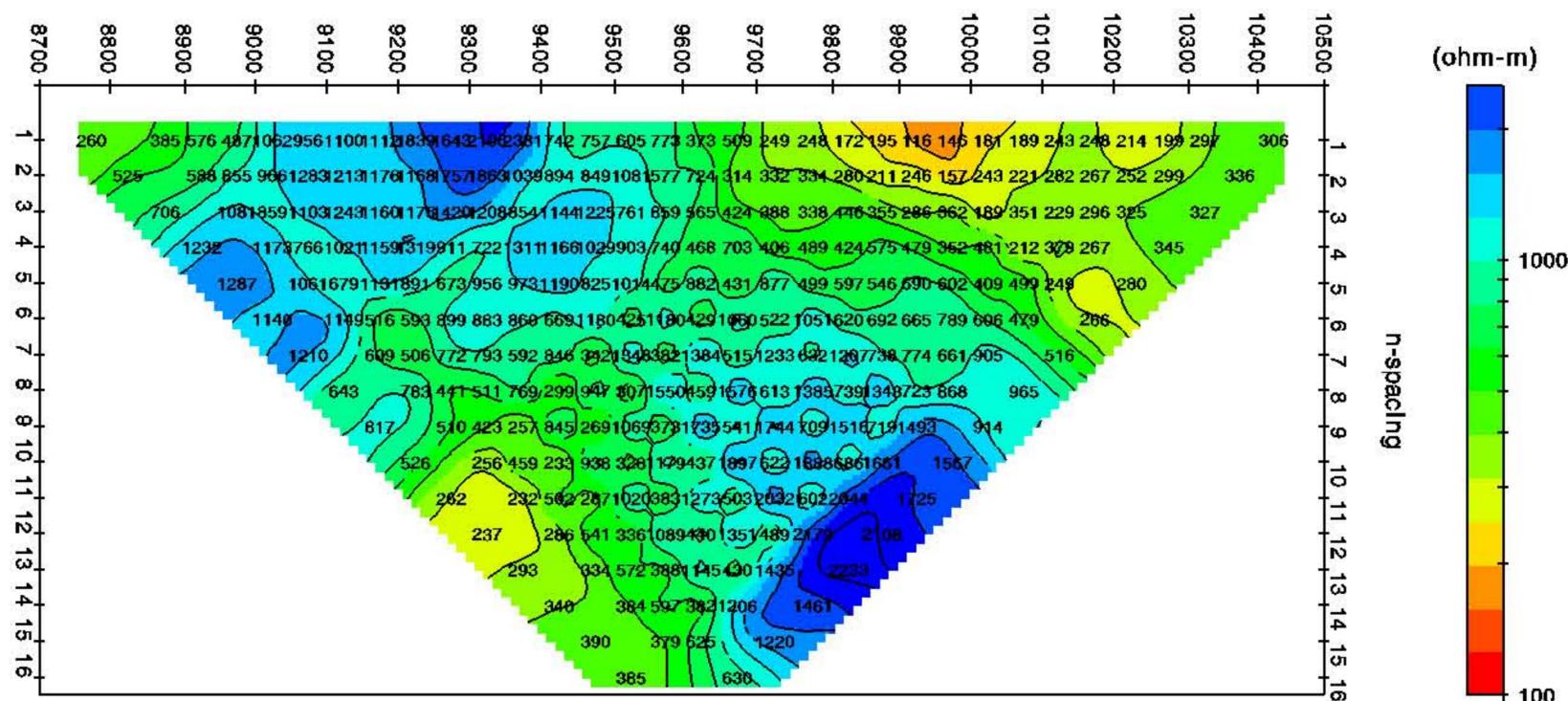
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Resistivity Inversion Model



Thomas Creek
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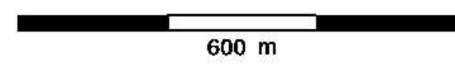
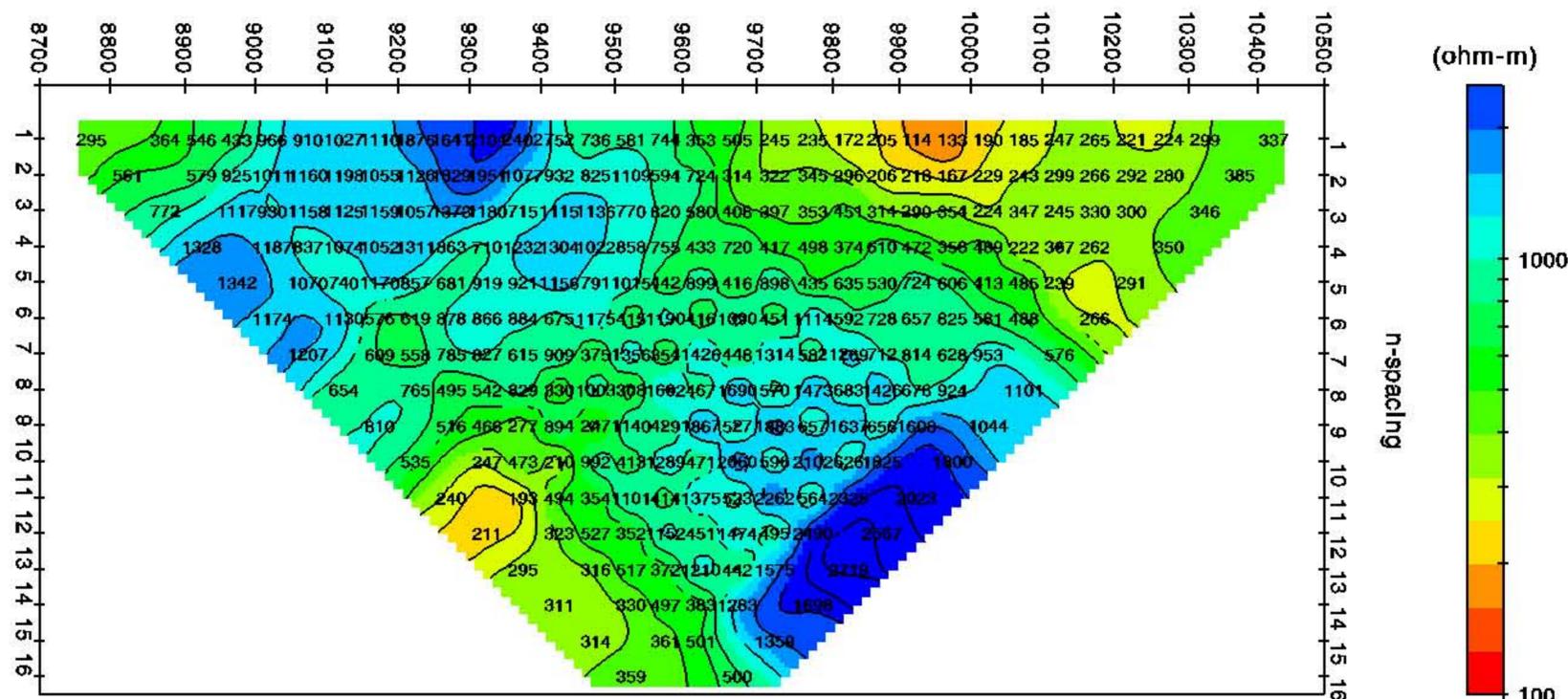
Resistivity Calculated Data



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TS2DIP v4.70e

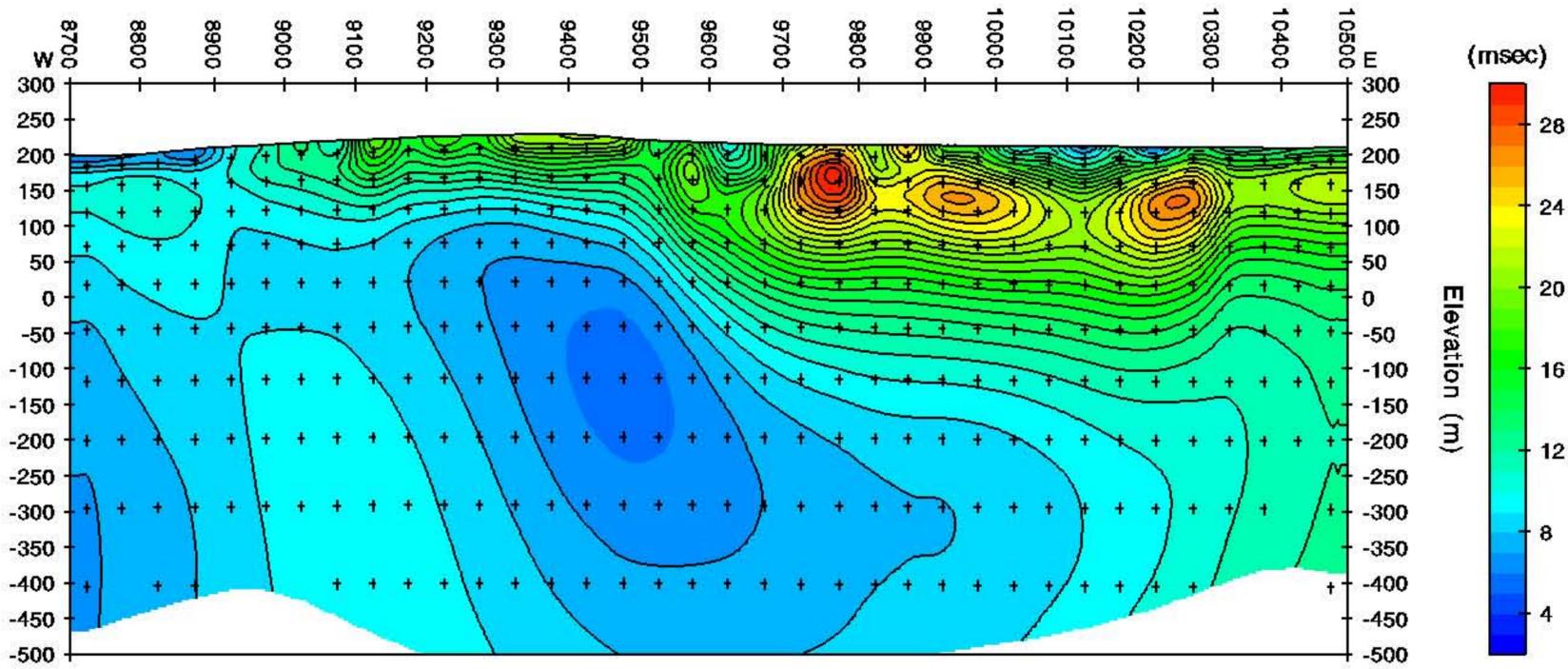
Resistivity Observed Data



Sherlock Minerals
Thomas Creek
Line 5286000N
2D Smooth-Model Inversion
Pole-Dipole Resistivity Data

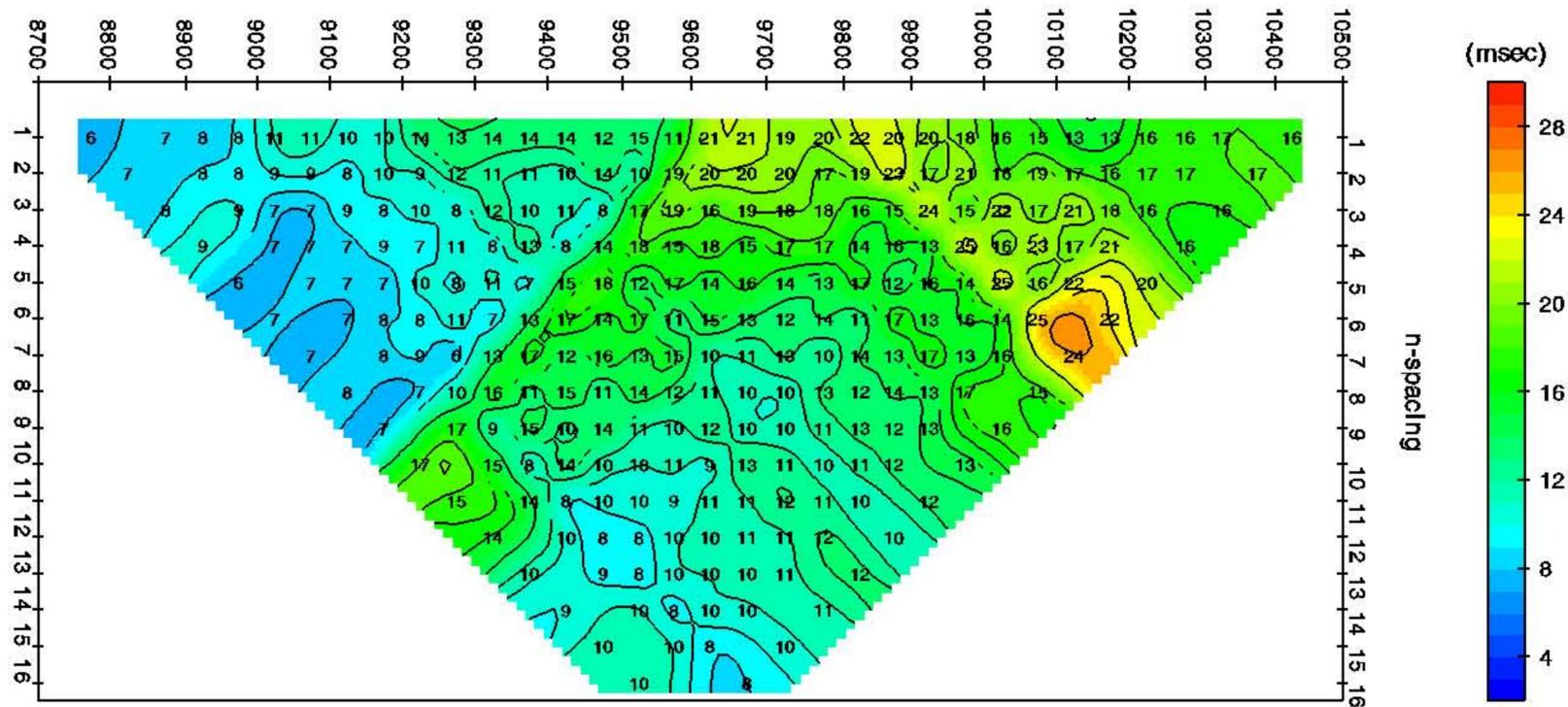
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IP Inversion Model



Thomas Creek
Line 5286000N

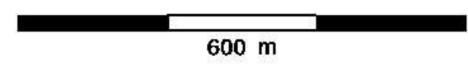
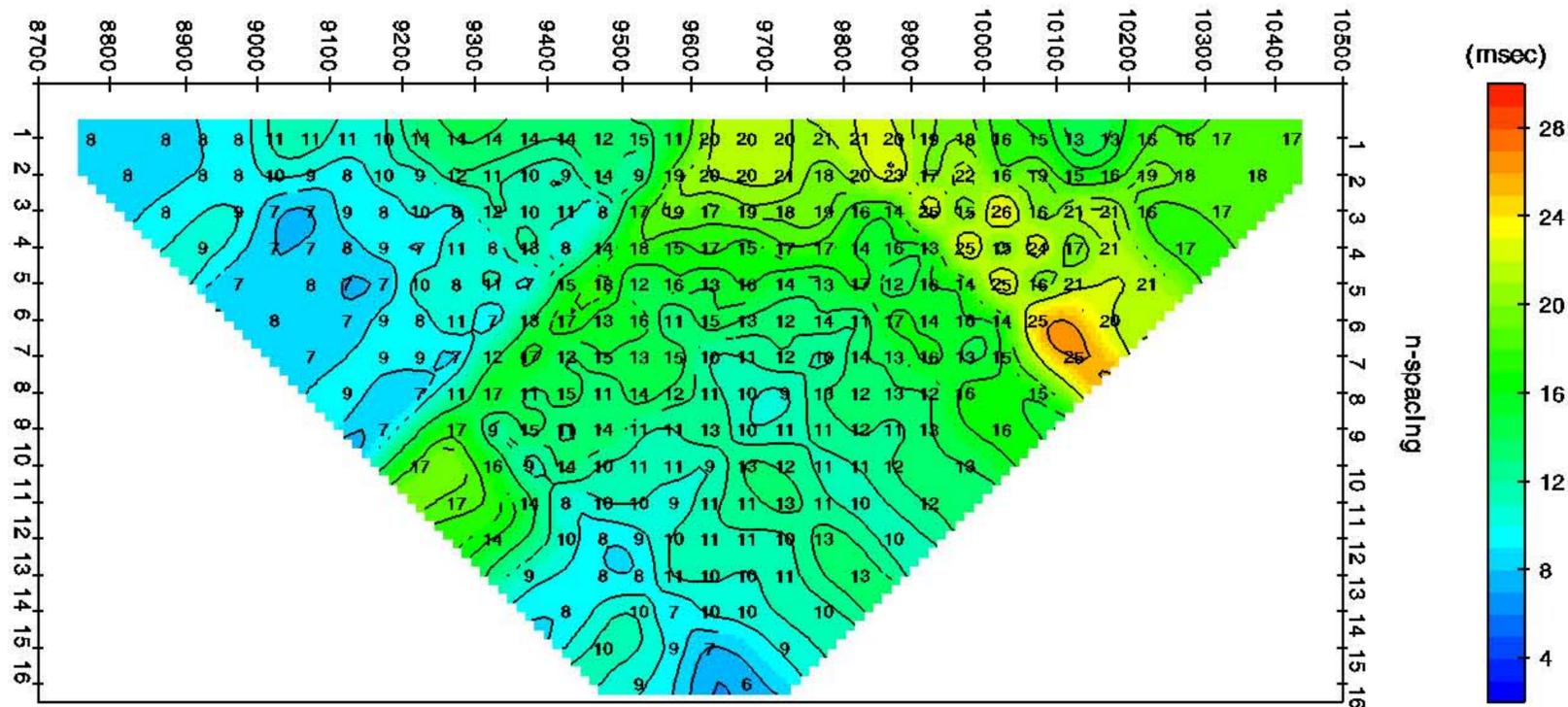
IP Calculated Data



Survey Parameters:
100 m Pole-Dipole data
0.125 hertz repetition rate

Inversion control parameters:
IPSmth=0.1, dpW=0.5, dxW=1, dzW=1
TS2DIP v4.70e

IP Observed Data



Sherlock Minerals
Thomas Creek
Line 5286000N
2D Smooth-Model Inversion
Pole-Dipole IP Data

AUTHOR	DRAWN	DATE	SCALE	REPORT
Zonge	Zonge	03/04/14	1:10000	140077
Line 5286000N.s2d				

APPENDIX II

Job 140077 Production Summary

APPENDIX III

Pre-Survey Client Checklist as completed by Sherlock Minerals



PRE SURVEY CLIENT CHECKLIST

Survey Details (Please attach maps or relevant documents)

1.	Zonge Job Number:	140077
2.	Client Company:	Sherlock Minerals
3.	Client Representative Planning Survey:	Peter Reid Graham Ascough
4.	Survey / Project Name:	Sorell Peninsula
5.	Exploration License Number:	E6/2013 and E7/2013
6.	Coordinate Datum / Zone to be used:	GDA 94 Z55
7.	Survey Type:	Pole-dipole IP (PDIP) Fixed Loop EM (FLEM)
8.	Station / Dipole Spacing:	PDIP: 100m (possibly 50m in places) FLEM:
9.	Frequency:	PDIP: 0.125Hz FLEM:
10.	Data coverage required for IP:	Min n=6, target n=10+ over main part of line
11.	Can the crew contact the client representative out of hours (weekends) if necessary?	Yes
12.	Will Zonge be required to perform specific processing or inversion modeling on the data acquired?	Yes
13.	Will the client require a hardcopy of the logistics report as well as digital?	No



PRE SURVEY CLIENT CHECKLIST

Site Details (please provide information where possible)

14.	Crew Accommodation:	Fly Camp, - Zonge to provide own sleeping tents. Sherlock will provide basic camp - messing tent, camp kitchen and food. 2KV power supply
15.	Client contact for crew (<i>name, phone and email</i>):	Peter Reid, 0407 955 141, sherlockminerals@gmail.com.au
16.	Relevant site liaison contacts (<i>name, phoowne and email</i>):	There will be at least one Sherlock Staff member on site during the program. Sherlock Satellite Phone Number 0424 211 853
17.	Will Zonge crew be required to contact landowners or other external interested parties?	No
18.	Level of mobile phone coverage at accommodation or survey area:	No Mobile coverage
19.	Please describe level of vehicle access along survey lines and expected topography (<i>attach photos or maps if possible</i>):	Helicopter access only. Fly camps will be set up on survey grids. Equipment will need to be carried along lines.
20.	Known obstacles along lines (<i>fences, roads etc</i>):	Wilderness area – working along pre-prepared cut lines
21.	Are cultural noise sources present (<i>power lines, fences, houses etc</i>)?	No
22.	Please describe access to nearest water source, both potable and non potable:	Local fresh water creeks.
23.	Are large volumes of water available for grounded electrodes (<i>up to ~2000L/day</i>)?	Water will be pumped from local streams
24.	Are there cultural or environmental restrictions the crew should be aware of?	The site is located in the southwest conservation area. Ensure all equipment and personnel boots etc entering are clean to avoid carrying seeds and phytosphora
25.	Please describe nearest refueling location (<i>diesel and petrol</i>):	Strahan. All fuel must be flown in by Helicopter
26.	Do you require daily or scheduled contact with crew?	Yes



PRE SURVEY CLIENT CHECKLIST

27.	Will the crew be required to work around other personnel?	There will be atleast one Sherlock Staff Member to assist the field crew. The line cutting crew (4 people) may be in camp some of the time.
28.	Please describe requirements (if any) for crew to work on site (<i>restricted work hours, induction, drug test, PPE etc</i>):	Basic Induction. Be aware this is a remote area and appropriate first aider supplies should be brought in. No fires are allowed. May be wise to wear snake gaiters when walking through vegetation.
29.	Have the lines been flagged prior to crew arrival?	Lines will be cut and flagged prior to arrival
30.	What level of rehabilitation of transmitter electrodes is required?	Fill in any holes that are dug.
31.	Will a client based Emergency Response Plan be available? (<i>If so please attach copy</i>)	An ERP is being drafted and will be forwarded ahead of the Survey.
32.	Will there be stock or animals in the survey area?	No
33.	Describe site vehicle requirements: <i>e.g. no split rims, flashing lights etc.</i>	--

Form reviewed by _____ **Peter Reid** _____ on behalf of Client

Date: _____ **19/2/2014** _____

APPENDIX 3

Evaluation of 2010 VTEM and 1997 GeoTEM results from the Sorell Peninsula

MEMORANDUM

To: Peter Reid

From: Graham Ascough

Date: 13/10/2014

Re: Evaluation of 2010 VTEM and 1997 GeoTEM results from the Sorell Peninsula

Reprocessing and re-interpretation of historic airborne geophysical surveys covering a large portion of Sherlock Minerals' exploration permits on the Sorell Peninsula has identified a number of priority targets that either were unrecognised or not prioritised during previous interpretations. Initial follow-up of one of these newly prioritised targets has been successful and has identified a new gossan anomalous in nickel and platinum that is now named the Henrietta Prospect. This result validates the re-interpretation of the results and demonstrate that there are targets in these historic datasets that will require follow-up.

The following summary briefly discusses the datasets, previous interpretations, the current methodology and the targets identified.

All prioritised anomaly picks targets have been provide in a Mapinfo compatible format so that they can be integrated with other datasets within a GIS environment for further review and prioritisation.

Background

Sherlock Minerals Limited holds two Exploration Licences on the Sorell Peninsula of Tasmania covering an area of 384km².

The primary area of interest for Sherlock is the 38km strike length of the underexplored southern portion of the highly prospective Mt Read Volcanic Belt that lies within its tenements (Figure 1). The tenements host the Thomas creek copper-gold porphyry prospect. In addition to Thomas Creek the area is prospective for volcanogenic massive sulphide (VMS) and nickel sulphide mineralisation, both of which are amenable to direct detection using airborne electromagnetic methods when they occur at shallow depths.

The area has been previously explored using a variety of airborne geophysical methods however on-ground exploration has been very limited. This review only focused on the airborne electromagnetic and accompanying magnetic data. Previous airborne electromagnetic surveys include; a helicopter time-domain VTEM survey completed by GEOTECH in 2010; a fixed-wing time-domain GEOTEM survey completed by Geoterrex in 1996; and a frequency-domain helicopter EM survey completed by DIGHEM 1986.



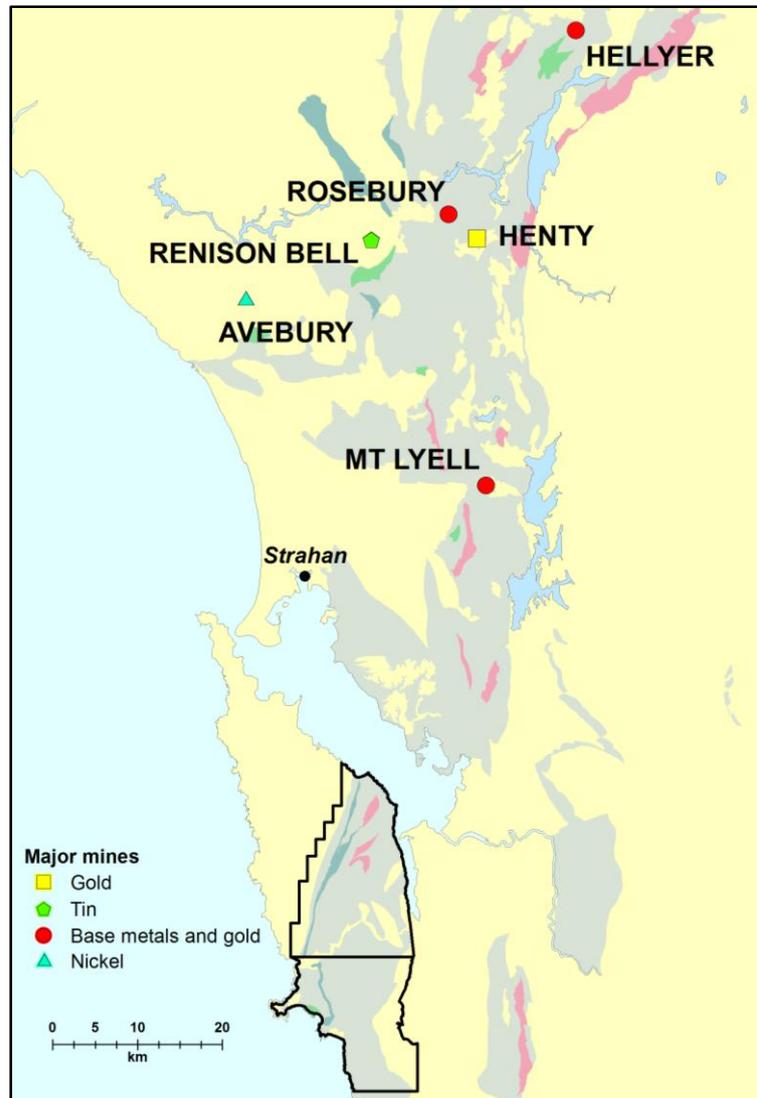


Figure 1: Tenements held by Sherlock minerals (black outline) on geology with significant deposits

For this report only the results of the 1996 Geotem survey and 2010 VTEM survey have been reviewed. It should also be noted that the VTEM survey covered a number of areas outside of the Sherlock tenements and only those areas within the Sherlock tenements (being Areas 3, 4, 5a and 5b) were reprocessed and reinterpreted (Figure 2). Similarly only the Geotem results from within Sherlock’s current tenements were reviewed in detail.

Previous interpretations of these surveys have been completed and both observed that there are a large number of EM anomalies evident in the datasets. Neither was overly encouraging however attributing many of the observed bedrock conductors to stratigraphic sources with low potential of being related to an accumulation of economic mineralisation. The 1997



interpretation of the Geotem survey concluded that the survey did not identified any very strong anomalies and more specifically that it 'did not define any high-priority targets considered to be related to VHMS mineralisation' (Reid and Close, 1997). The report on the VTEM results only recommended a single target in the Sherlock tenement area for immediate exploration follow-up. The target was a cluster of three EM anomalies on adjacent lines on Area 5b and the report noted that "Areas 3, 4 and 5a contained few if any bedrock conductors." (Reid and Godber, 2010).

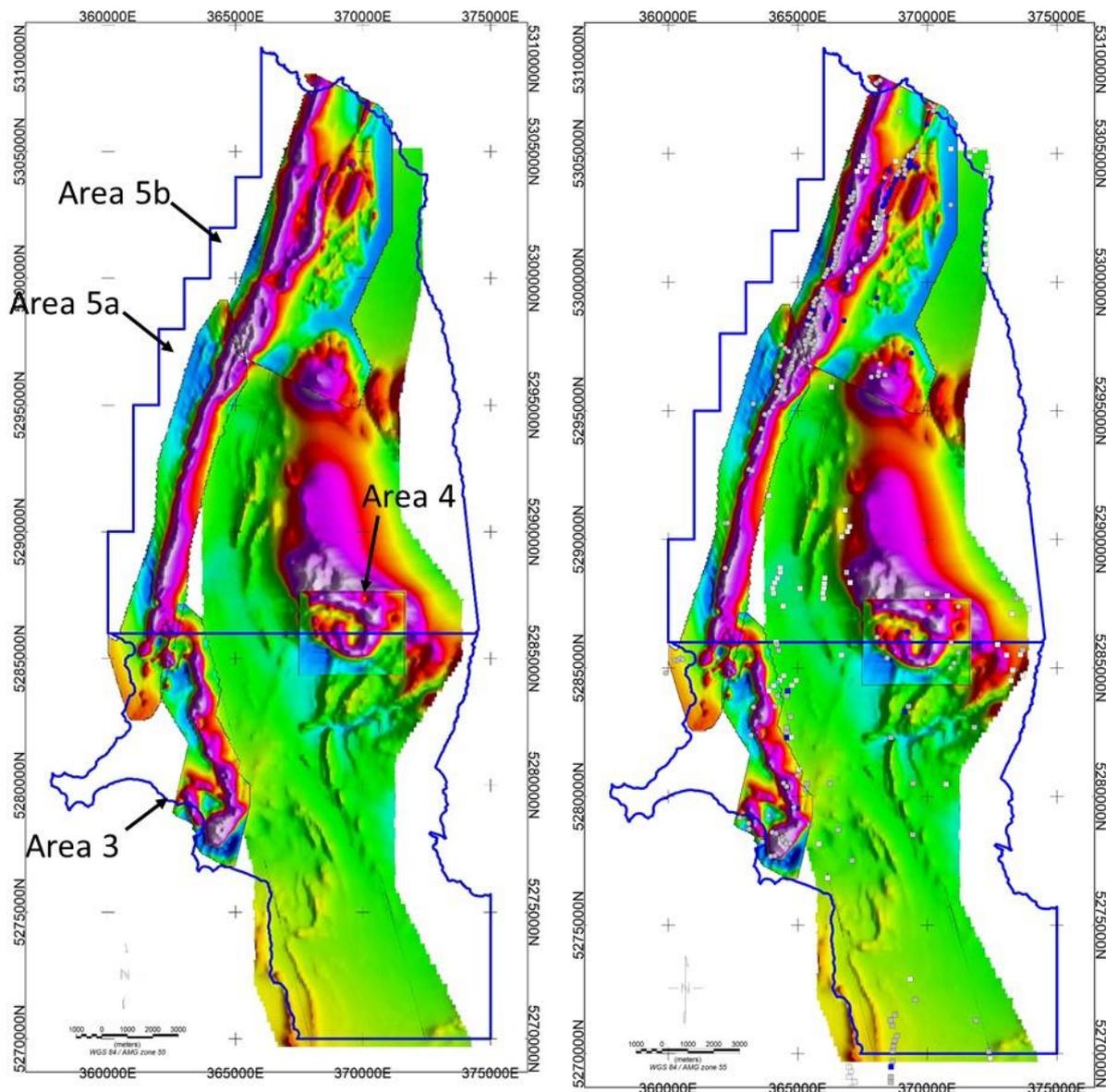


Figure 2: Compilation of airborne survey locations magnetic image (RHS also includes the anomaly picks)

The recent evaluation and reinterpretation of the results supports the recommendation of immediate follow-up of anomalies 5B_34, 5B_36 and 5B_38 as defined in Reid and Godber, 2010. It has also identified two other priority targets evident in both the VTEM and GeoTEM in



Area 5b that warrant immediate follow-up along with a number of lower priority anomalies that require further investigation. These are summarised on an area by area basis below.

Methodology

The airborne survey results were reviewed in image format (plan maps) and on a line by line basis in profile format. Individual anomaly picks were identified using the EM profiles focusing primarily on late time features that appear to be bedrock sourced. They were prioritised on the amplitude and character of the response with an emphasis on more conductive responses (qualitative estimate only) with a magnetic association. Many of the more obvious surficial responses were ignored or assigned a lower priority and only those anomalies with the highest potential to be a bedrock sourced were prioritised.

The analysis has been largely qualitative at this stage and the next phase of work should include modelling of specific anomalies to better determine the location, geometry and conductance of the potential source of the anomaly picks prior to drilling.

Results

Area 5b

Interpretation of the VTEM and GeoTEM surveys identified two, NNE trending, roughly parallel bedrock conductors that are interpreted to represent shearing between the ultramafics and surrounding sediments (Figure 3) . A review of the profile data has identified a 1.4km long portion of the north-eastern conductor that is significantly stronger and of higher amplitude than the northern and southern extent of this 5km long stratigraphic conductor. The anomaly is also associated with a strong magnetic response. As ultramafic units are mapped in the vicinity of this target it may represent sulphide mineralisation and was recommended for immediate follow-up. Initial reconnaissance to the area identified gossanous material at this location with anomalous nickel and platinum values. Further work is warranted and the prospect has been named Henrietta.

The second priority target is situated immediately west of the Hill 99 VMS prospect. This conductor is not as strong as the Henrietta anomaly but its proximity to a known mineral occurrence increases the likelihood that it may be related to VMS mineralisation and as such is recommended for further work.

The Target indicate as 5b-34,36,38 also warrants immediate follow-up. It is characterised by a limited strike length conductor (~400m) with a coincident magnetic response on the northern extent of a weaker stratigraphic conductor.



Henrietta North is a lower priority but still recommended for follow-up. It is characterised by a late time EM response with a coincident magnetic high and has a strike length of approximately 400m.

Geophysical modelling (EM and magnetic) of the targets described above is recommended to assist with follow-up and to better determine the location, geometry and conductance of the potential source of anomalies.

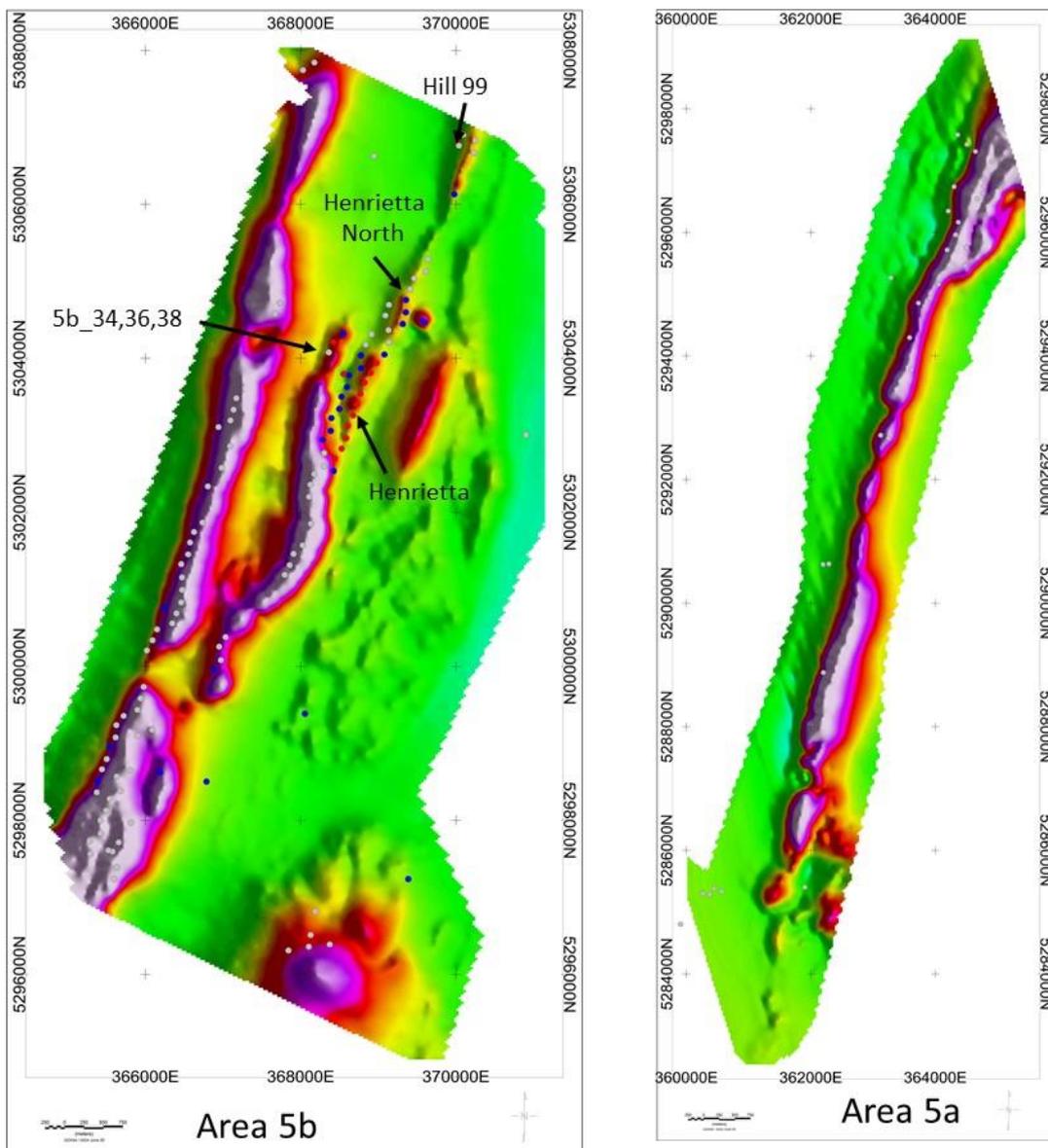


Figure 3 (left) and Figure 4 (right): Airborne magnetic images with VTEM anomaly picks with red being the highest priority, blue being a lower priority and grey being the lowest priority targets



Area 5a

There are no high priority targets evident in the EM data and the selected anomalies are a low priority for follow-up (Figure 4).

Area 3

There are no high priority targets evident in the EM data and the selected anomalies are a low priority for follow-up (Figure 5).

Area 4

Area 4 covers the Thomas Creek Porphyry target. There are no clear priority targets or bedrock conductors evident in the Thomas Creek Area EM results. The low priority picks are based on very subtle late time EM features that are at the noise threshold of the survey results. As such these targets have a low priority and low confidence rating (Figure 6).

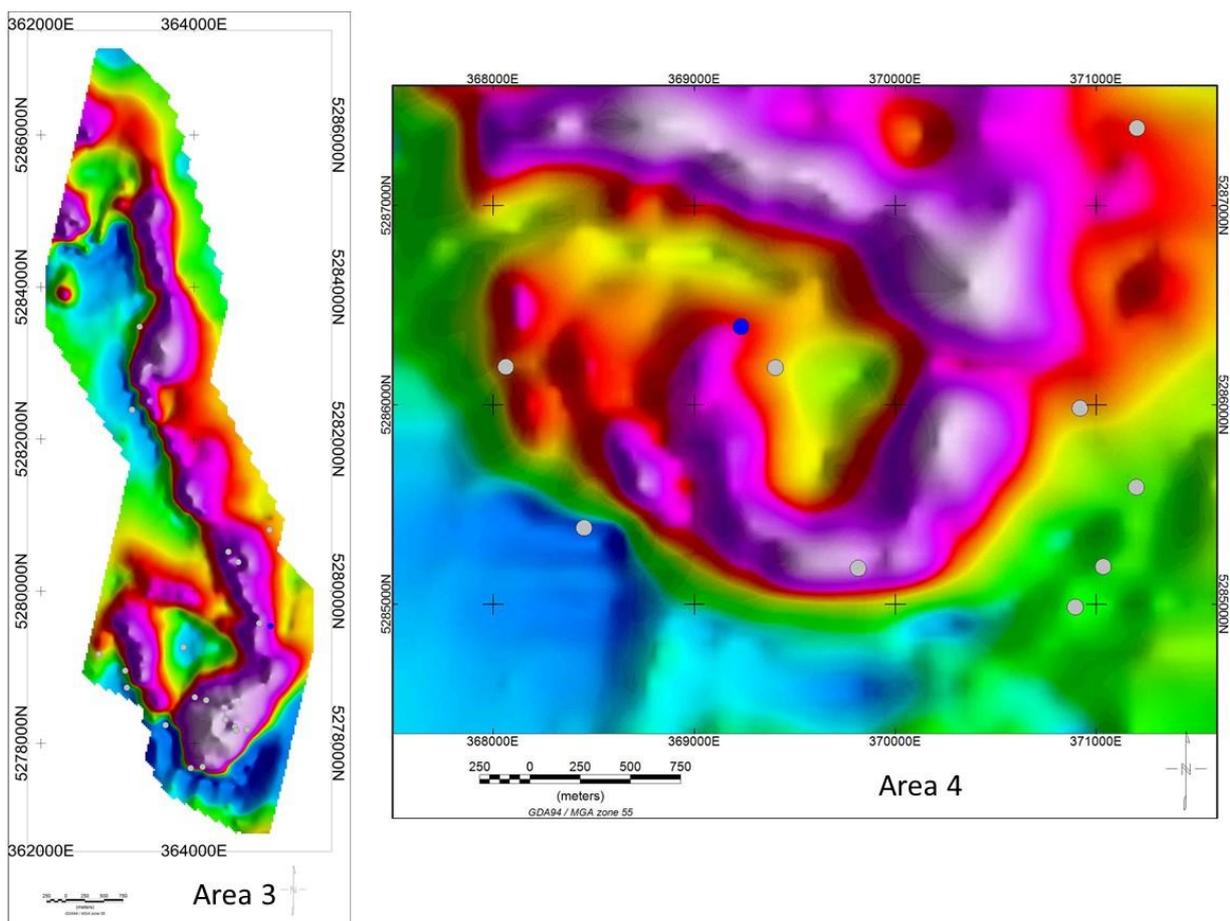


Figure 5 (left) and Figure 6 (right): Airborne magnetic images with VTEM anomaly picks with red being the highest priority, blue being a lower priority and grey being the lowest priority targets



Conclusion

The evaluation and re-interpretation of historic airborne geophysical datasets over Sherlock Minerals' exploration tenements on the Sorrell Peninsula in Western Tasmania have identified new targets and initial follow-up has identified a new mineral prospect. Further work is warranted and field programs to assess the priority targets that include geological mapping and sampling are recommended.

Prior to the filed programs geophysical modelling (EM and magnetic) of the targets described above is recommended to assist with the follow-up and to better determine the location, geometry and conductance of the potential source of anomalies.

REFERENCES

Geotech Airborne Ltd., 2010, Survey and logistics report on a helicopter borne versatile time domain electromagnetic (VTEM) survey on the Sorrell, Tasmania area Australia.

Reid, R., and Godber, K., 2010, Interpretation of VTEM, Sorell Peninsula and Macquarie Harbour, Western Tasmania; Geoforce Ref ME1265MH_2.0.

Reid, R., and Close, R., 1997, Exploration Licenses 4/92 and 7/92 Sorell Peninsula, Annual report on exploration activity to September 1996: Plutonic Operations Ltd Report 97-3989.



GEOTEM Survey Picks

Anomaly	Easting (GDA 94)	Northing (GDA 94)	Line	Priority
1	375855	5257079	7041	0
2	375050	5260072	7041	0
3	373668	5265230	7041	0
4	372434	5269821	7041	0
5	370727	5280470	7031	0
6	370773	5287804	7031	0
7	370912	5305183	7031	0
8	367274	5300432	7021	0
9	366299	5295919	7021	0
10	364444	5287403	7021	0
11	364163	5286007	7021	0
12	364758	5282307	7011	0
13	365062	5281053	7011	0
14	365814	5278155	7011	0
15	366155	5276833	7011	0
16	368321	5268302	7011	0
17	370413	5259940	7011	0
18	370546	5259460	7011	0
19	370691	5258905	7011	0
20	371846	5305113	3411	0
21	367538	5304906	3401	0
22	369309	5304901	3401	0
23	371638	5304891	3401	0
24	368779	5304698	3391	0
25	367516	5304694	3391	0
26	367412	5304493	3381	0
27	372320	5304511	3381	0
28	372323	5304297	3371	0
29	367656	5304301	3371	0
30	367296	5304307	3371	0
31	372268	5304121	3361	0
32	369008	5303908	3352	1
33	368833	5303699	3341	1
34	368755	5303500	3331	2
35	367116	5303506	3331	2
36	367049	5303302	3321	3



Anomaly	Easting (GDA 94)	Northing (GDA 94)	Line	Priority
37	368660	5303295	3321	2
38	368631	5303100	3311	1
39	368521	5302897	3301	1
40	368550	5302714	3291	0
41	368091	5302507	3281	0
42	367966	5302306	3271	0
43	368030	5302112	3261	0
44	368185	5302110	3261	0
45	372302	5302108	3261	0
46	367973	5301711	3241	0
47	372275	5301689	3241	0
48	372248	5301282	3221	0
49	367591	5300896	3201	0
50	372258	5300888	3201	0
51	372293	5300699	3191	0
52	367251	5300502	3181	0
53	372211	5300501	3181	0
54	363879	5291701	2741	0
55	366827	5291130	2711	0
56	367004	5290495	2681	0
57	366921	5290307	2671	0
58	366693	5290098	2661	0
59	364328	5288893	2601	0
60	366886	5288714	2591	3
61	364330	5288713	2591	0
62	364220	5288486	2581	0
63	366045	5288496	2581	0
64	372936	5288489	2581	0
65	367021	5288317	2571	0
66	366029	5288274	2571	0
67	364113	5288311	2571	0
68	364041	5288103	2561	0
69	365090	5288092	2561	0
70	366013	5288099	2561	0
71	370004	5287893	2551	0
72	365973	5287910	2551	0
73	364065	5287900	2551	0
74	365993	5287698	2541	0



Anomaly	Easting (GDA 94)	Northing (GDA 94)	Line	Priority
75	373440	5287705	2541	3
76	373911	5287301	2521	0
77	373270	5287105	2511	0
78	372717	5285904	2451	0
79	364196	5285902	2451	3
80	364271	5285676	2441	3
81	373681	5285697	2441	3
82	373596	5285513	2431	0
83	373069	5285495	2431	0
84	366687	5285502	2431	0
85	373300	5284910	2401	0
86	373676	5284699	2391	0
87	364465	5284696	2391	0
88	364304	5284508	2381	0
89	364949	5284511	2381	0
90	373222	5284508	2381	0
91	364784	5284316	2371	0
92	364073	5284308	2371	0
93	363896	5284110	2361	0
94	364612	5284099	2361	2
95	364582	5283908	2351	3
96	364222	5283911	2351	3
97	369281	5283504	2331	3
98	364137	5283502	2331	3
99	369122	5283305	2321	2
100	364726	5283099	2312	3
101	371820	5282689	2291	3
102	364568	5282687	2291	3
103	364573	5282500	2281	3
104	368598	5282291	2271	3
105	364574	5282289	2271	2
106	365349	5280487	2181	3
107	366242	5280502	2181	3
108	369451	5280504	2181	3
109	365309	5280297	2171	3
110	365467	5278902	2101	3
111	366562	5278711	2091	3
112	369441	5278517	2081	3



Anomaly	Easting (GDA 94)	Northing (GDA 94)	Line	Priority
113	367096	5277507	2031	3
114	369339	5272896	1801	0
115	369538	5272099	1761	3
116	368740	5271510	1731	3
117	368583	5271299	1721	3
118	371882	5271294	1721	3
119	368650	5271093	1711	3
120	368824	5270693	1691	3
121	368738	5270503	1681	3
122	368698	5270290	1671	3
123	368660	5270107	1661	3
124	372377	5270088	1661	3
125	368659	5269705	1641	3
126	368604	5269485	1631	2
127	366976	5269484	1631	0
128	367056	5269313	1621	0
129	368591	5269089	1611	3
130	366982	5269093	1611	0
131	367194	5268914	1601	0
132	368594	5268887	1601	3
133	367070	5268684	1591	0
134	367354	5268511	1581	0
135	368050	5268297	1571	0
136	367276	5268288	1571	0
137	367509	5268121	1561	0
138	368021	5268109	1561	0
139	368069	5267881	1551	0
140	367387	5267893	1551	0
141	367363	5267720	1541	0
142	367862	5267707	1541	0
143	373147	5267708	1541	3
144	367882	5267501	1531	0
145	367808	5267313	1521	0
146	373812	5267101	1511	3
147	368289	5267097	1511	0
148	367871	5267091	1511	0
149	368018	5266886	1501	0
150	372219	5266711	1491	3



Anomaly	Easting (GDA 94)	Northing (GDA 94)	Line	Priority
151	368708	5266699	1491	3
152	367807	5266679	1491	0
153	367939	5266494	1481	0
154	369039	5266492	1481	3
155	367577	5266296	1471	0
156	367350	5266111	1461	0
157	373410	5265912	1451	3
158	367830	5265900	1451	0
159	367290	5265691	1441	0
160	373282	5265699	1441	3
161	367254	5265502	1431	0
162	367305	5265296	1421	0
163	371850	5265300	1421	3
164	367296	5265087	1411	0

VTEM Survey Picks

Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
1	364999.4475	5279539.908	30040	2	3
2	364694.4948	5278179.305	30040	0	3
3	364536.6433	5278214.519	30050	0	3
4	364852.3299	5279577.875	30050	0	3
5	364989.2981	5280806.084	30060	0	3
6	364410.0191	5278311.377	30060	0	3
7	364112.5743	5277688.527	30070	0	3
8	364579.4869	5280383.102	30080	0	3
9	364160.0463	5278565.924	30080	0	3
10	363957.629	5277671.898	30080	0	3
11	364011.3099	5278604.584	30090	0	3
12	364449.7469	5280517.285	30090	0	3
13	363628.6214	5278238.188	30110	0	3
14	363861.5711	5279262.198	30110	0	3
15	363123.0101	5278730.405	30150	0	3
16	362759.8711	5279167.909	30180	0	3
17	363190.8878	5282386.405	30200	0	3
18	363290.1826	5283478.251	30210	3	3
19	364550.7536	5278164.7	93010	0	3



Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
20	363101.8216	5278953.503	93010	0	3
21	370895.0699	5284985.931	40040	3	4
22	369814.9709	5285181.181	40050	3	4
23	371034.2252	5285188.872	40050	3	4
24	368451.757	5285382.977	40060	0	4
25	371198.9035	5285587.053	40070	0	4
26	370918.6483	5285982.463	40090	0	4
27	369403.9405	5286186.326	40100	0	4
28	368062.9649	5286190.089	40100	0	4
29	369232.6579	5286390.883	40110	2	4
30	371201.9477	5287387.181	40160	0	4
31	360267.3365	5285298.558	50020	3	5a
32	360378.023	5285291.005	50030	3	5a
33	360447.5692	5285380.282	50040	3	5a
34	360565.3858	5285332.213	50050	3	5a
35	361902.7462	5285402.126	50180	3	5a
36	362201.1111	5288875.493	50310	3	5a
37	362197.105	5290619.432	50360	3	5a
38	362195.064	5290626.317	50360	3	5a
39	362289.2605	5290635.111	50370	3	5a
40	363121.2802	5292716.324	50510	3	5a
41	363246.6916	5292667.485	50520	3	5a
42	363586.6438	5294296.544	50600	3	5a
43	363285.4982	5295265.008	50600	3	5a
44	363727.9264	5294854.655	50630	3	5a
45	363913.7007	5294939.411	50650	3	5a
46	364048.9258	5295158.82	50670	3	5a
47	364188.9186	5295714.921	50700	3	5a
48	364207.2869	5296344.586	50720	3	5a
49	364324.4324	5295959.907	50720	3	5a
50	364478.2767	5295462.976	50720	3	5a
51	364492.8847	5295756.633	50730	3	5a
52	364369.7412	5296163.489	50730	3	5a
53	364301.0802	5296739.414	50740	3	5a
54	364674.1311	5296541.953	50770	3	5a
55	364359.383	5297578.03	50770	3	5a
56	364506.0191	5297423.507	50780	3	5a
57	364757.2848	5296626.885	50780	3	5a
58	364779.2853	5296863.698	50790	3	5a



Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
59	364644.1325	5297307.942	50790	3	5a
60	364905.3808	5297144.236	50810	3	5a
61	364775.1836	5296746.765	94970	3	5a
62	363610.0814	5293778.682	94980	3	5a
63	359907.2393	5284803.326	95010	3	5a
64	365597.1889	5297237.934	55030	3	5b
65	367842.3111	5296310.239	55040	3	5b
66	365629.6402	5297389.194	55040	3	5b
67	365290.5822	5297562.905	55040	3	5b
68	365280.6371	5297730.983	55050	3	5b
69	365576.6861	5297593.898	55050	3	5b
70	368104.2405	5296359.264	55050	3	5b
71	368373.8044	5296388.522	55060	3	5b
72	368127.8806	5296511.101	55060	3	5b
73	365655.7417	5297713.883	55060	3	5b
74	365423.0746	5297832.599	55060	3	5b
75	365421.8647	5297999.014	55070	3	5b
76	368189.7888	5296818.011	55080	3	5b
77	365813.9313	5297970.736	55080	3	5b
78	365496.2982	5298127.527	55080	3	5b
79	365373.5974	5298363.904	55090	3	5b
80	365540.0296	5298279.207	55090	3	5b
81	365681.0854	5298385.489	55100	3	5b
82	365386.9243	5298515.228	55100	2	5b
83	365440.762	5298662.878	55110	3	5b
84	365630.784	5298569.957	55110	3	5b
85	365799.5951	5298650.9	55120	3	5b
86	365501.1855	5298796	55120	3	5b
87	365537.4187	5298950.343	55130	2	5b
88	366188.6289	5298627.347	55130	2	5b
89	365615.807	5299076.713	55140	3	5b
90	366786.6741	5298503.068	55140	2	5b
91	369385.6222	5297237.492	55140	2	5b
92	365900.0616	5299099.636	55150	3	5b
93	365625.501	5299236.002	55150	3	5b
94	365719.8	5299356.43	55160	3	5b
95	366086.4176	5299175.316	55160	3	5b
96	365896.612	5299433.886	55170	3	5b
97	365938.2198	5299582.503	55180	3	5b



Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
98	365977.1984	5299733.737	55190	3	5b
99	366018.346	5300206.427	55220	3	5b
100	368055.0785	5299384.009	55230	2	5b
101	366880.8418	5299957.75	55230	2	5b
102	366091.1635	5300338.075	55230	3	5b
103	366149.7702	5300480.533	55240	3	5b
104	366971.9084	5300080.64	55240	3	5b
105	366949.992	5300255.957	55250	3	5b
106	366346.9185	5300557.857	55250	3	5b
107	366244.5903	5300765.141	55260	2	5b
108	366400.3454	5300688.33	55260	3	5b
109	367032.0592	5300379.173	55260	3	5b
110	366460.3004	5300829.281	55270	3	5b
111	366473.2454	5300992.523	55280	3	5b
112	366472.0847	5301155.178	55290	3	5b
113	366461.3248	5301327.628	55300	3	5b
114	366550.3428	5301454.112	55310	3	5b
115	366574.7492	5301608.566	55320	3	5b
116	367794.6823	5301188.118	55330	3	5b
117	366626.4949	5301745.008	55330	3	5b
118	366735.311	5301866.886	55340	3	5b
119	367858.3389	5301315.237	55340	3	5b
120	367907.8293	5301461.234	55350	3	5b
121	368026.0848	5301571.619	55360	3	5b
122	366804.0873	5302336.958	55370	3	5b
123	368132.4793	5301850.641	55380	3	5b
124	366982.4526	5302577.594	55390	3	5b
125	368107.8311	5302201.234	55400	3	5b
126	368125.8313	5302359.894	55410	3	5b
127	367090.3392	5302859.833	55410	3	5b
128	366940.8033	5303107.15	55420	3	5b
129	368174.5921	5302496.081	55420	3	5b
130	368424.7376	5302538.657	55430	2	5b
131	368299.8054	5302599.81	55430	3	5b
132	367095.1864	5303193.215	55430	3	5b
133	367135.6816	5303332.974	55440	3	5b
134	368302.6688	5302769.333	55440	3	5b
135	368440.662	5302698.29	55440	1	5b
136	368526.2259	5302826.123	55450	1	5b



Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
137	368282.2867	5302942.806	55450	2	5b
138	367171.5279	5303482.291	55450	3	5b
139	368386.7748	5303058.948	55460	2	5b
140	368585.2529	5302963.946	55460	1	5b
141	368609.7027	5303124.684	55470	1	5b
142	368394.8183	5303223.96	55470	2	5b
143	368497.5539	5303341.87	55480	2	5b
144	368673.897	5303257.6	55480	1	5b
145	368724.2937	5303401.323	55490	1	5b
146	368524.9094	5303500.909	55490	2	5b
147	368595.9918	5303626.348	55500	2	5b
148	368768.1625	5303539.535	55500	1	5b
149	368822.5655	5303685.156	55510	1	5b
150	368624.0593	5303778.723	55510	2	5b
151	368361.8219	5304077.253	55520	3	5b
152	368777.5157	5303870.232	55520	2	5b
153	368898.388	5303810.619	55520	1	5b
154	370902.3225	5303006.448	55530	3	5b
155	368977.3277	5303939.317	55530	1	5b
156	368777.0331	5304037.555	55530	2	5b
157	368424.5495	5304209.82	55530	1	5b
158	367669.4991	5304579.03	55530	3	5b
159	367731.433	5304719.271	55540	3	5b
160	368547.9624	5304318.772	55540	2	5b
161	368835.8039	5304179.257	55540	3	5b
162	369078.6782	5304049.358	55540	2	5b
163	369137.8471	5304204.754	55550	3	5b
164	368912.5739	5304312.819	55550	3	5b
165	369132.2636	5304366.473	55560	3	5b
166	369314.7639	5304446.127	55570	2	5b
167	369091.0467	5304555.998	55570	3	5b
168	369136.5795	5304695.159	55580	3	5b
169	369354.1789	5304597.803	55580	2	5b
170	369593.2724	5304471.209	55580	2	5b
171	369356.0154	5304758.064	55590	2	5b
172	369411.8557	5304898.386	55600	3	5b
173	369462.7941	5305037.442	55610	3	5b
174	369612.9301	5305130.106	55620	3	5b
175	369639.4845	5305285.728	55630	3	5b



Anomaly	Easting (GDA94)	Northing (GDA 94)	Line	Priority	Block
176	369979.0064	5306130.749	55690	2	5b
177	368943.8891	5306627.25	55690	3	5b
178	370233.6614	5306669.146	55730	3	5b
179	370038.057	5306762.39	55730	3	5b
180	368029.7696	5307742.544	55730	3	5b
181	368176.727	5307841.436	55740	3	5b
182	370094.5027	5306902.887	55740	3	5b
183	370251.8124	5306829.495	55740	3	5b
184	365523.6633	5297609.646	95210	3	5b
185	368550.6774	5303797.318	95210	1	5b
186	370025.2755	5306837.071	95210	1	5b



Appendix 7
Petrological report

Pontifex & Associates Pty Ltd

MINERALOGY — PETROLOGY • SECTION PREPARATION

A.B.N. 25 007 521 084

26 Kensington Rd, Rose Park
South Australia 5067
Tel: +61 8 8332 6744
Fax: +61 8 8332 5062

PO Box 91
Kent Town SA 5071
AUSTRALIA

Email:
ian@pontifexpetrographics.com.au
Website:
www.pontifexpetrographics.com.au

MINERALOGICAL REPORT No. 10400 *by Alan C Purvis, PhD and Ian R. Pontifex MSc.*

30 June 2014

TO: Peter Reid
Sherlock Minerals
90 Statenborough Street
Erindale SA 5060

YOUR REFERENCE: Samples personally delivered 2/6/14

MATERIAL: Rock Samples, Thomas Creek Prospect,
Tasmania

IDENTIFICATION: TC2, TC3A & B

WORK REQUESTED: Section preparation, description and report

SAMPLES & SECTIONS: Withheld waiting your collection

DIGITAL COPY: Emailed 30/6/14
sherlockminerals@gmail.com



PONTIFEX & ASSOCIATES PTY LTD

INTRODUCTION

Two outcrop samples from western Tasmania are described in this report using one polished thin section, one thin section and one polished section. These samples are from the Thomas Creek prospect and represent intrusive lithologies possibly correlated with the Mount Read Volcanics.

The samples are labelled TC2, TC3A (the larger part of TC3) and TC3B (the smaller part of TC3). The petrography classifies TC2 as a massive weakly altered gabbro, with a visually estimated primary mineralogy of 55% plagioclase, 40% pyroxene, 4-5% opaque oxide, 1-2% quartz, <1% pyrite and trace extremely fine chalcopyrite. Some pyroxene has been altered to actinolite, and plagioclase has weak sericite alteration. The alteration may be denteric or later hydrothermal.

Sample TC3A may be classified as a microtonalite (or intrusive dacite?) It is massive and finer crystalline than TC2, and more altered, composed of 50-55% sericite-clay-limonite ex-plagioclase, 20-25% quartz, 20% chlorite (\pm leucoxene), and 3-4% actinolite. Minor localised pyrite in TC3A occurs within quartz-filled miarolitic cavities, and in possible vein-quartz in TC3B.

INDIVIDUAL DESCRIPTIONS

TC2

Weakly altered gabbro with large partly uralitised pyroxene grains, abundant weakly sericitised plagioclase, interstitial amphibole (with rare residual pyroxene), accessory scattered opaque oxide, rare quartz and trace pyrite ± extremely fine chalcopyrite.

Macroscopic

This hand specimen is roughly triangular, with abundant quite coarse greenish-grey possible pyroxene or amphibole as grains or aggregates to 6mm long, in an apparently feldspar-rich matrix. It appears to represent pyroxene-rich gabbro.

Microscopic

The thin section confirms fresh and partly uralitised pyroxene as single crystals and aggregates to 7mm, forming about 30% of the thin section. There are also aggregates of tremolite-actinolite, mostly fine-grained, making up about 10% of the section, possibly replacing groundmass pyroxene, but residual pyroxene is rare in these aggregates. Weakly sericitised plagioclase forms about 55% of the sample as random laths to 4mm, with weak zoning in some grains. Irregular opaque grains to 1.5mm long are disseminated (4-5%), and there is very minor interstitial quartz to 1mm grainsize (1-2%). Accessory opaque grains include pyrite, and trace extremely fine chalcopyrite, as well as scattered composite hematite-magnetite ± ilmenite aggregates.

Interpretation

This sample is identified as altered gabbro, with relatively weak alteration, possibly deuteric or of hydrothermal origin.

TC3A and TC3B

Macroscopic

The larger hand specimen (TC3A) is massive, and fine crystalline with probable feldspar shapes and darker spots. It may be volcanic or from a dyke. A smaller hand specimen has visible pyrite.

Microscopic

Petrographically the bulk of TC3A is massive fine-grained with abundant orange-brown sericitised and limonitised random plagioclase laths to 1mm long (~50%), accompanied by sparse sericitised plagioclase phenocrysts to 4mm long (3-4%). Patches of chlorite (~20%) have replaced mafic crystals (pyroxene and/or amphibole), with sparse (3%) actinolite ± chlorite derived from larger pyroxene phenocrysts to 3mm long. Up to 25% quartz is mostly fine-grained and interstitial, but other local patches of quartz are up to 2mm in diameter. Two of these patches are rimmed by possible pyrite and one has grains of unidentified high refractive index material, possibly rutile. Accessory leucoxene occurs within chlorite.

The smaller hand specimen (TC3B) examined in a polished section has local skeletal/mossy pyrite over an area of 8 x 4 mm, together with probable vein-quartz. The host rock is similar to the same as TC3.

Interpretation

This sample seems to represent a massive, fine crystalline weakly plagioclase-pyroxene porphyritic microtonalite, with more extreme chlorite-sericite-limonite alteration than in TC2, and local pyrite. Some of the pyrite is attached to or intergrown with quartz, partly in possible miarolitic cavities and partly in a more vein-like host.



Fig 1 **TC2 X2 TSXN**
Gabbro, with zoned altered grey and white clinopyroxene on the right hand side. Left half is amphibole, enclosed weakly sericitised bluish plagioclase. Sparse grains of black-opaque oxide (magnetite and leucoxene) are scattered.

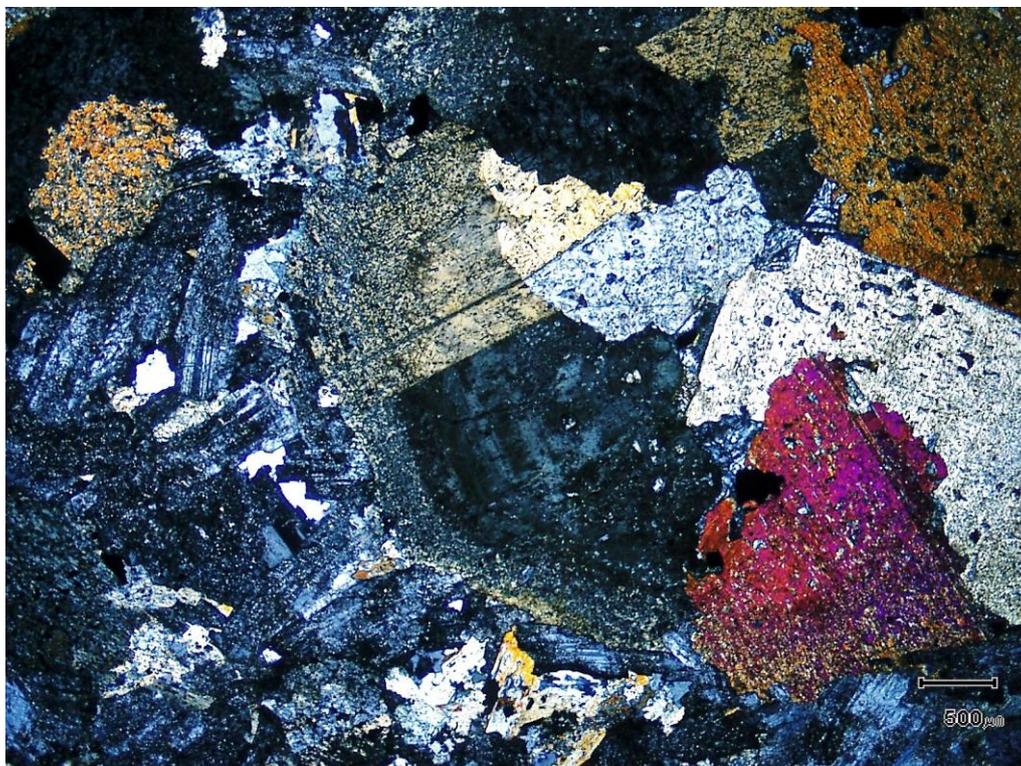


Fig 2 **TC2 X2 TSXN**
Aggregate of zoned clinopyroxene, weakly mottled amphibole, with bluish sericitised plagioclase. Sparse white interstitial quartz to the left of the pyroxene.

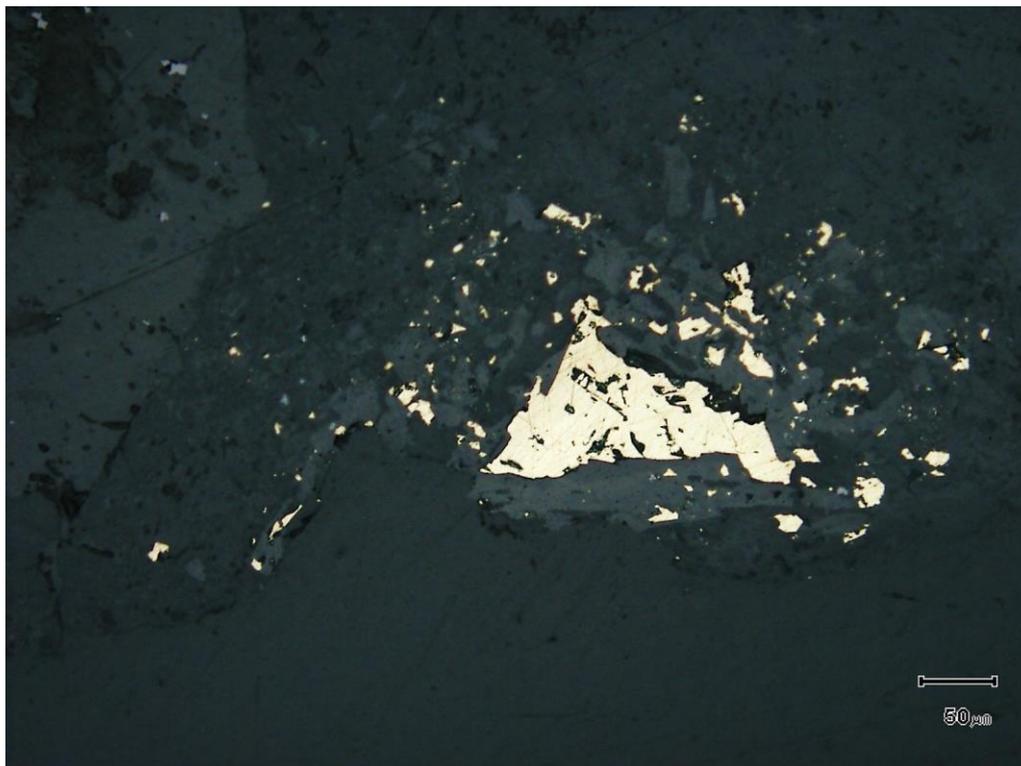


Fig 3

TC2 X20 PTSRPL

A small patch of chalcopyrite on the edge of the thin section. Possibly magmatic or deuteric, set within amphibole and plagioclase.

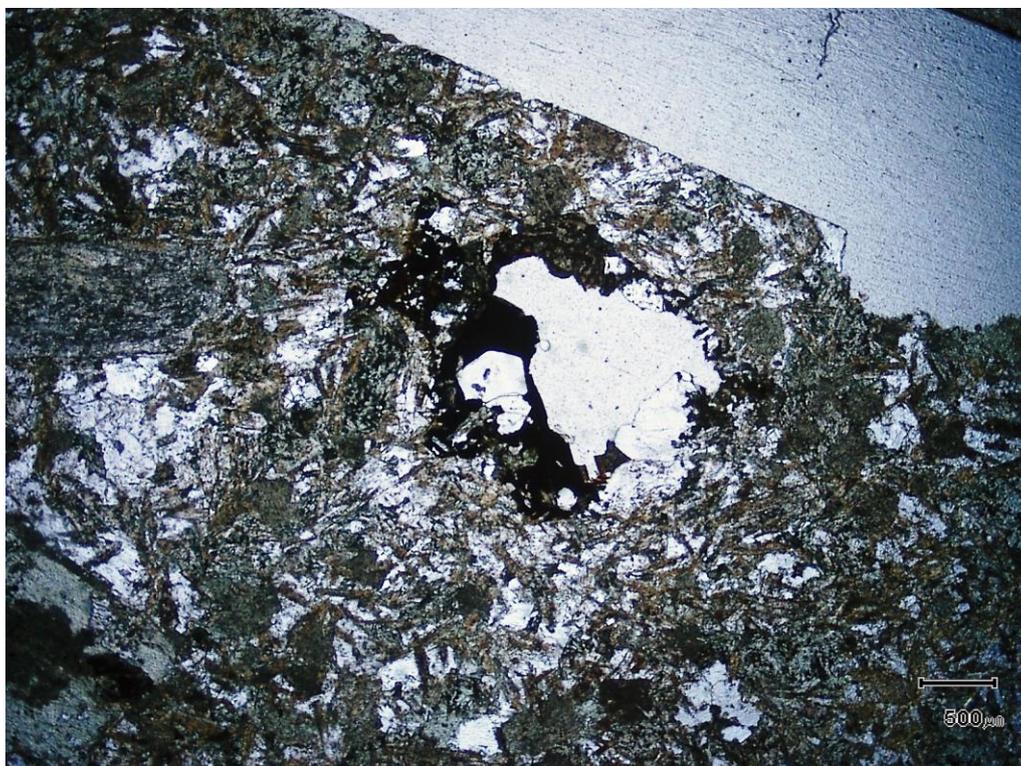


Fig 4

TC3A X2 TSPPL

Altered microtonalite/dacite with interlocking random small greenish amphibole (altered pyroxene), whitish plagioclase and interstitial quartz. Black-opaque pyrite partly rims a miarolitic cavity with a clear infill of quartz.

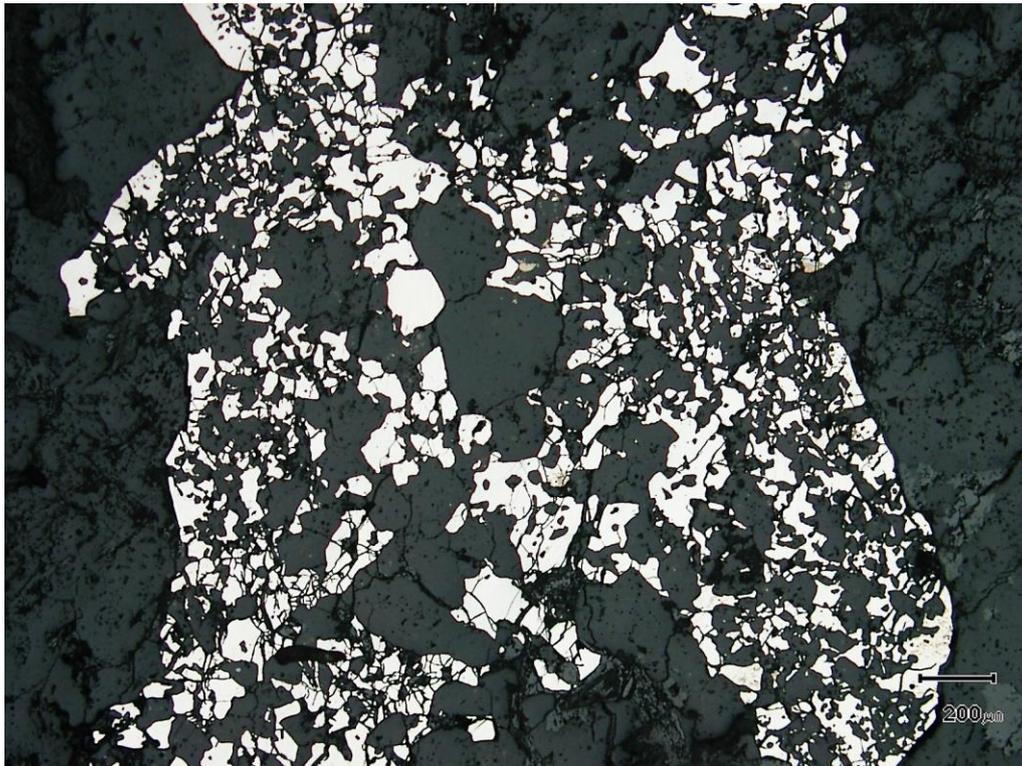


Fig 5 **TC3B X5 PSRPL**
Local patch of pyrite in quartz, possibly in a vein.