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

SORELL PENINSULA, TASMANIA

For the period 22nd October 2015 to 21st October 2016

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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 geological, geochemical and geophysical datasets; target generation
- Preparations to undertake shallow diamond drilling over areas of high copper soil anomalism at Thomas Creek Prospect
- Assessment of cobalt anomalism at Thomas Creek
- Assessment of high gold soil geochemistry over the tenement group
- Application for exemption of conditions to defer ground activities due to the severe down turn in mineral exploration industry

At Thomas Creek, ore grade copper and gold mineralisation has been identified at the surface as a result of follow-up of anomalously high copper values in soils. High cobalt up to 0.36% has also been obtained from soil and weathered sap rock samples from Company and historical geochemical sampling. With the ongoing protracted negative investment climate for early stage mineral exploration in Australia, the Company has applied for an exemption to defer the completion of the current work program till the end of the 2016-17 summer field season.

Proposed future ground works comprise infill and extension geochemical sampling over the Thomas Creek Prospect and shallow diamond drilling across identified shallow copper mineralised areas and over the broader area of alteration. A Ground EM survey is planned for Henrietta prospect to accurately locate the source of the late time conductor to upgrade this prospect to drill ready status. Gold anomalism identified east of the Noddy Creek Prospect will be followed up with reconnaissance soil and rock chip sampling.

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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. 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 (Figure 1). 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 a coastal landing by boat or by helicopter from Strahan. Access within the project areas is achieved on foot via historical exploration tracks (all of which are currently unsuitable for vehicular egress) and cut lines. 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 226 km^2 (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. In September 2015 Sherlock made a voluntary reduction of non-core licence areas where exploration works did not locate any prospects of interest. Tenement details are provided in Table 1.

TENEMENT	GRANT DATE	SIZE AT GRANT(km^2)	SIZE AFTER Sept 15 REDUCTION (km^2)
EL 6/2013	2/10/2013	225	135
EL 7/2013	22/10/2013	169	91
TOTAL		**394**	**226**

Table 1: Sorell Project tenement particulars

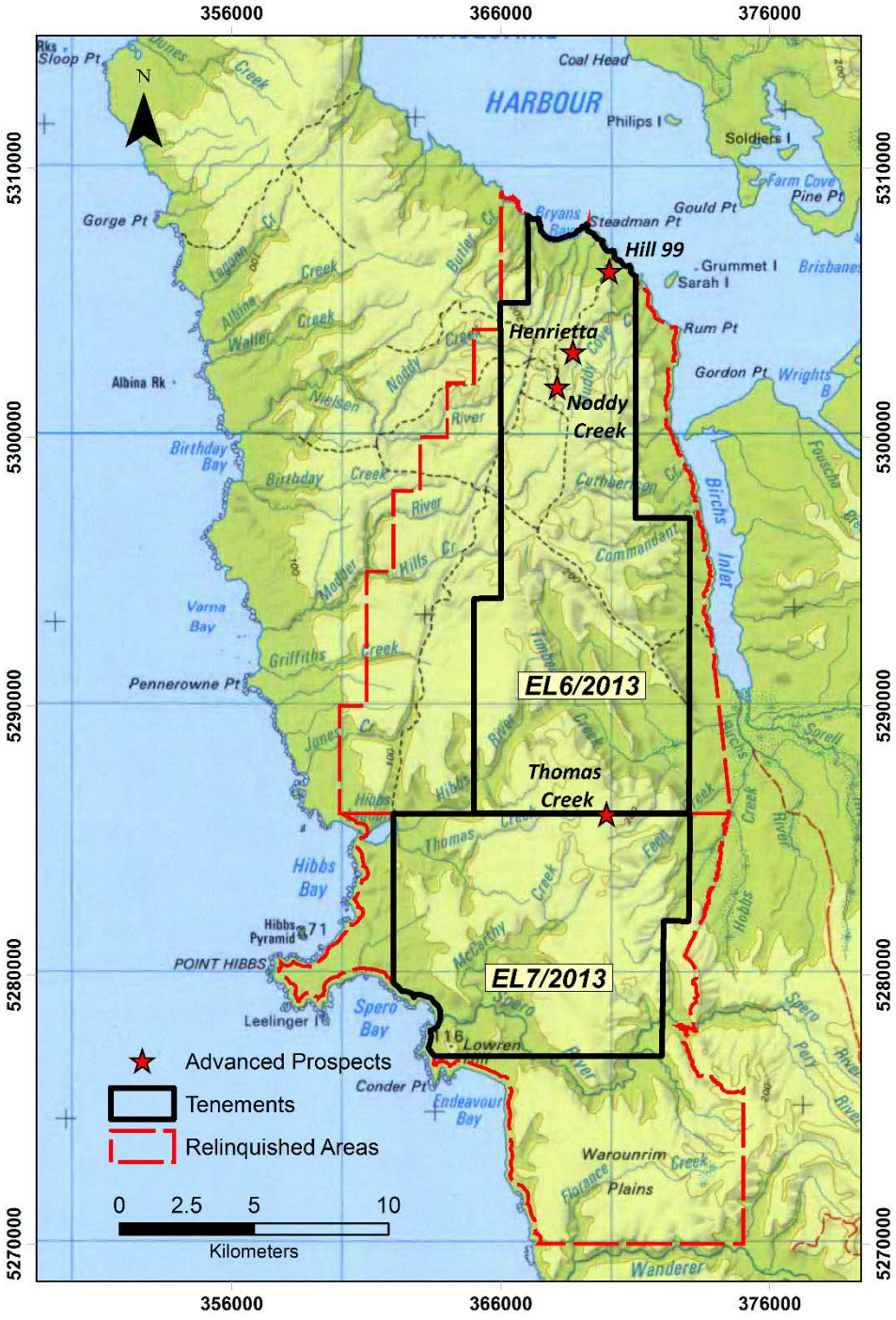

Figure 1: Sorell Tenements Project location plan

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).

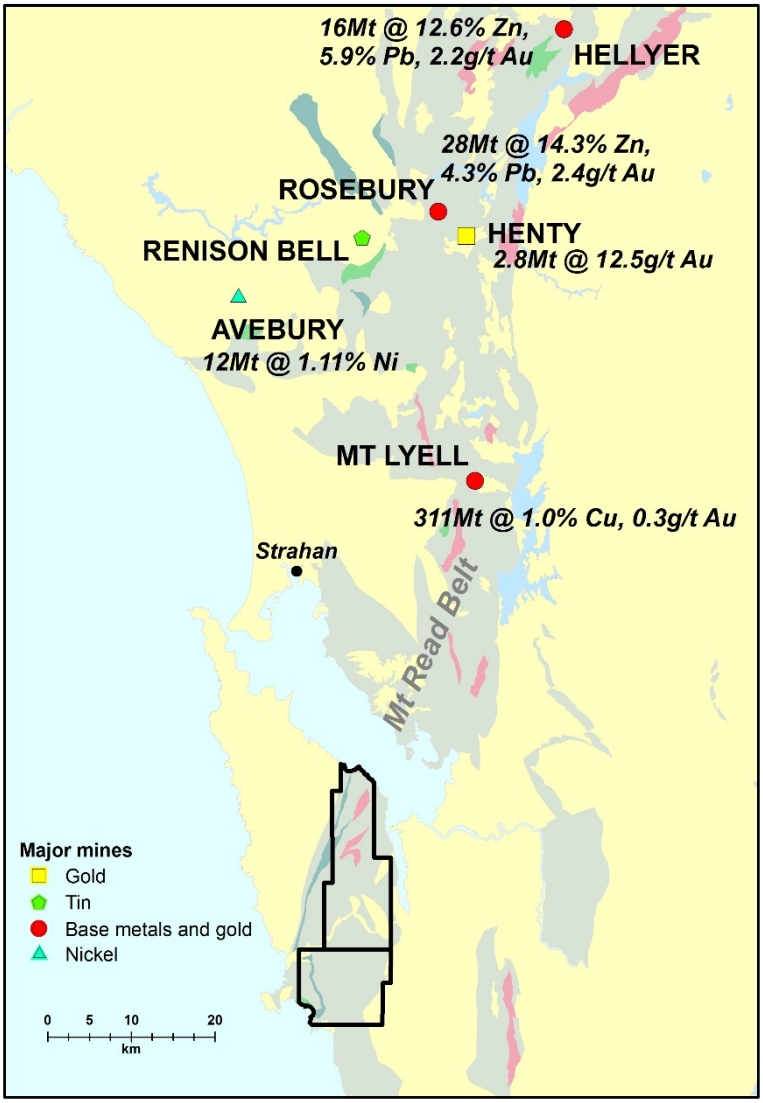

Figure 2: Pre-Permian published geology and major mineral deposits

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.

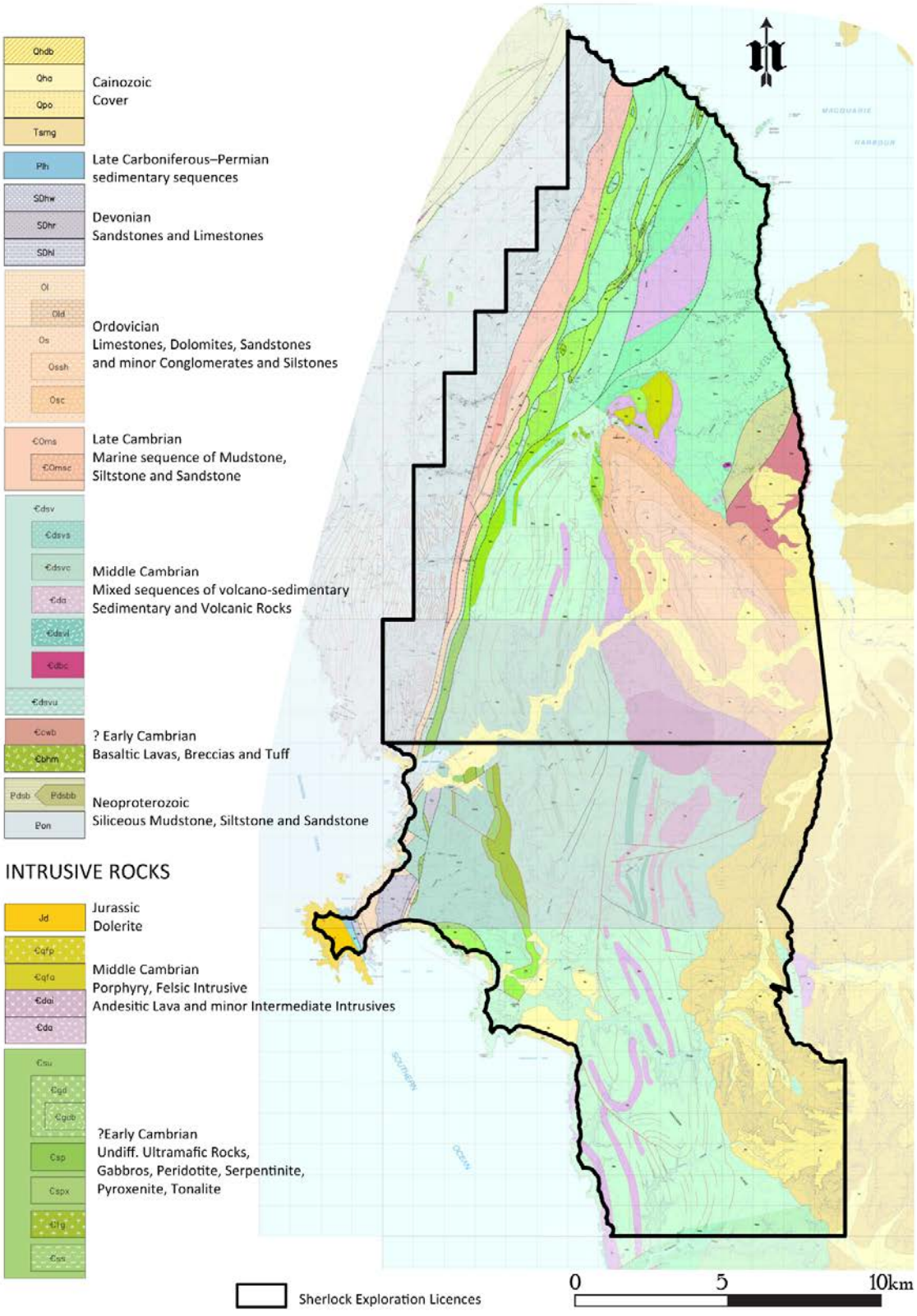

Figure 3: Sorell Peninsula published geology

1.4 Previous Investigations

Mineral exploration in the Sorell Peninsula area has been undertaken by numerous explorers, with significant work including:

- 1956–1962 Lyell-EZ Explorations (LEE).
- 1964–1972 BHP Exploration.
- 1983-88 Amoco Minerals Australia Company (and JV partners).
- 1992-1998 Plutonic Operations limited
- 1998-2001 - Pacific-Nevada Mining Pty Ltd
- 2007 – 2012 MHM Metals

This work, alongside mapping undertaken by the state geological survey, has greatly improved the geological understanding of the area and has identified numerous area of interest including the Thomas Creek copper-gold prospect, the Hibbs ultramafic belt and the Hill 99 prospect.

Since the mid 80's explorers have undertaken numerous detailed airborne magnetic and electromagnetic surveys covering significant portions of tenements held by Sherlock (Figure 4). Reprocessing and reinterpretation of this data has greatly aided Sherlock in target identification. A detailed description of work undertaken by previous explorers is provided in the Company's 1st annual report (Reid et al, 2014).

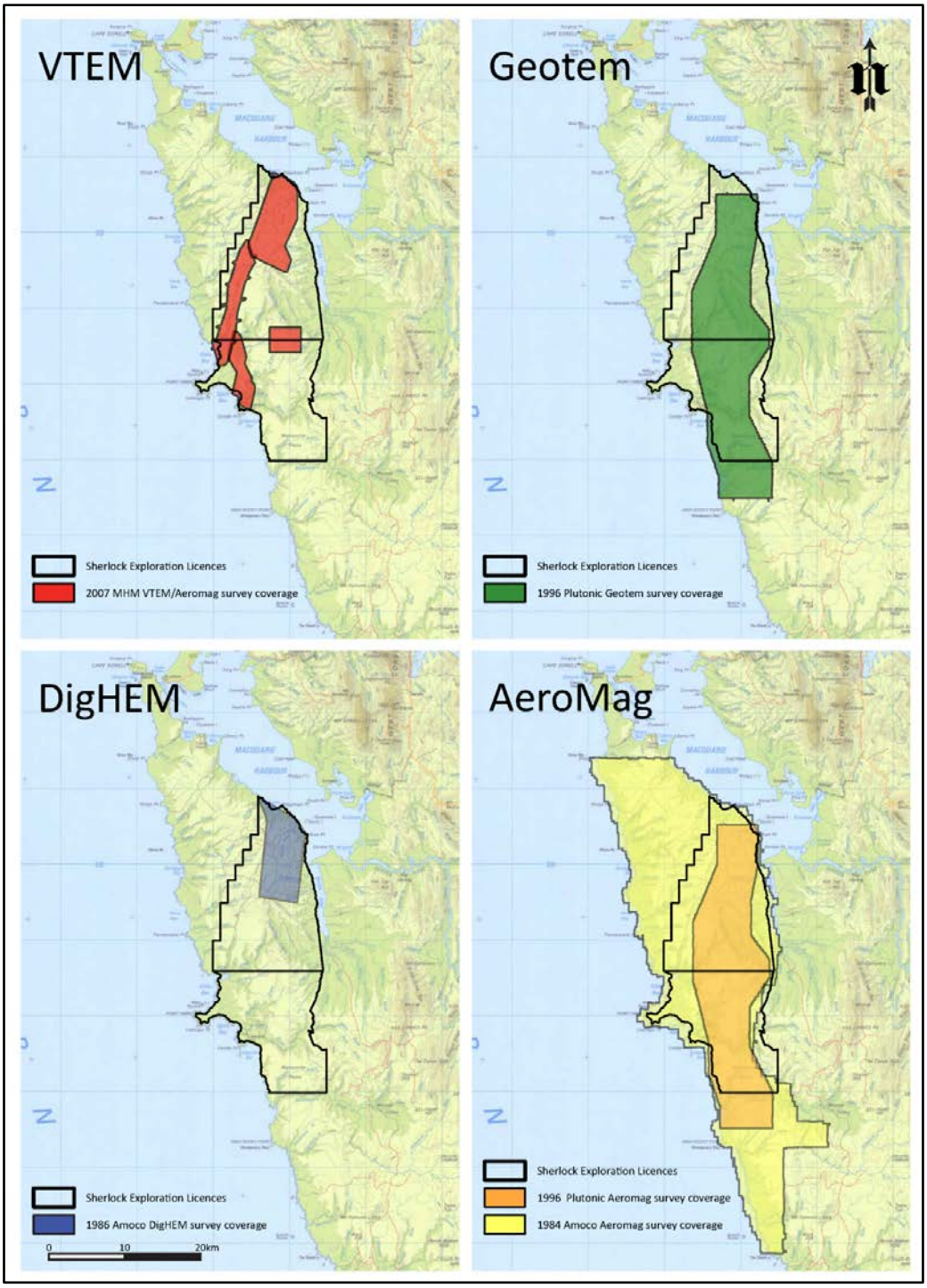

Figure 4: Summary of airborne geophysical surveys

1.5 Sherlock - Previous Exploration

1.5.1 Year 1 - 2013-14

Exploration undertaken during the first year of tenure included:

- Compilation and review of previous exploration
- Reprocessing of open-file airborne geophysical datasets; target generation
- 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

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 to appear to have been tested by historical exploration drill holes and is strongly recommended for drill testing (Figure 5).

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.

Within the Hibbs Ultramafic Belt, reprocessing and interpretation of historical airborne electromagnetic survey data identified a high amplitude conductive target, ‘Henrietta’, approximately 1.4 km in strike length (Figure 6). Preliminary field investigations at Henrietta located gossanous material with elevated nickel and platinum assays.

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.

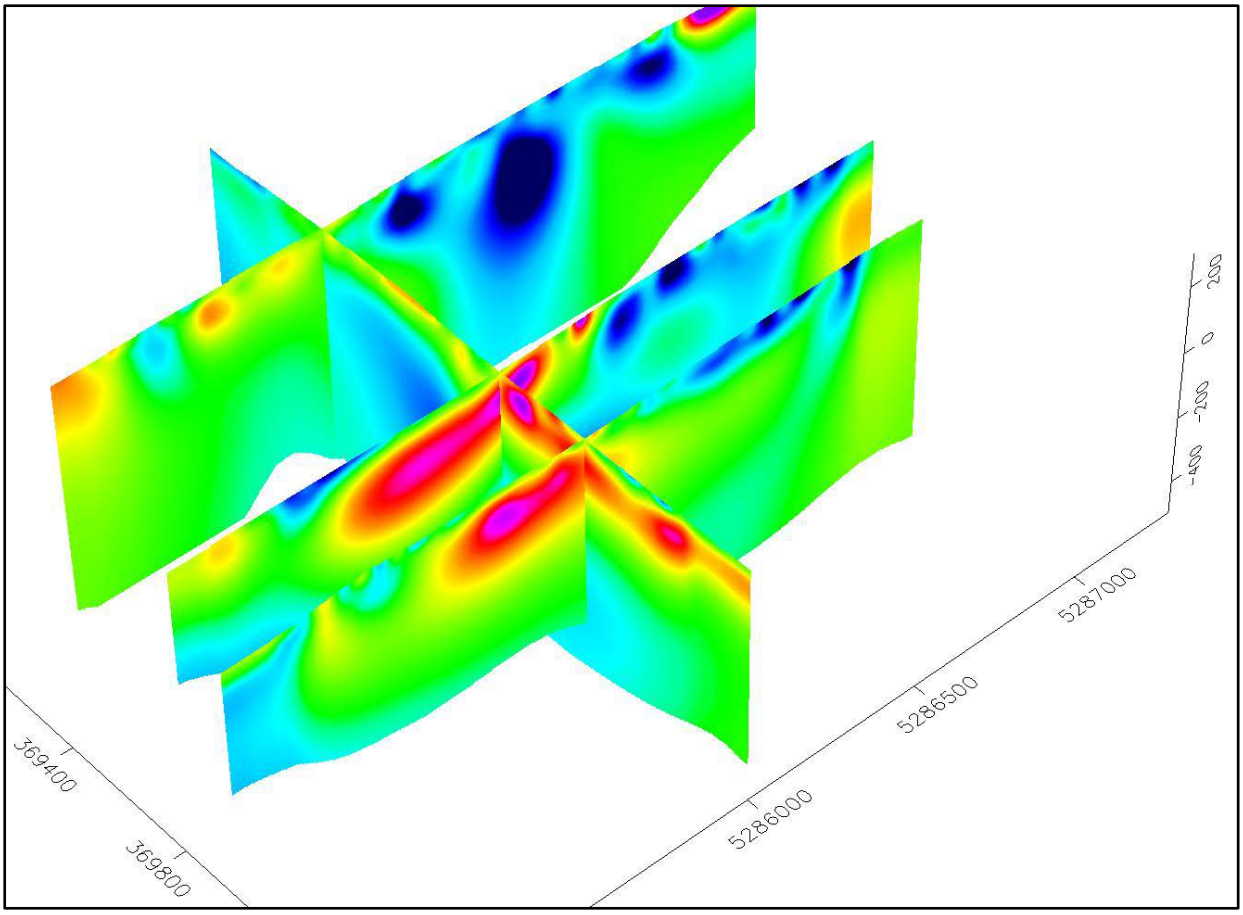

Figure 5: Thomas Creek - IP inversion model showing large chargeable target (red and magenta colours)

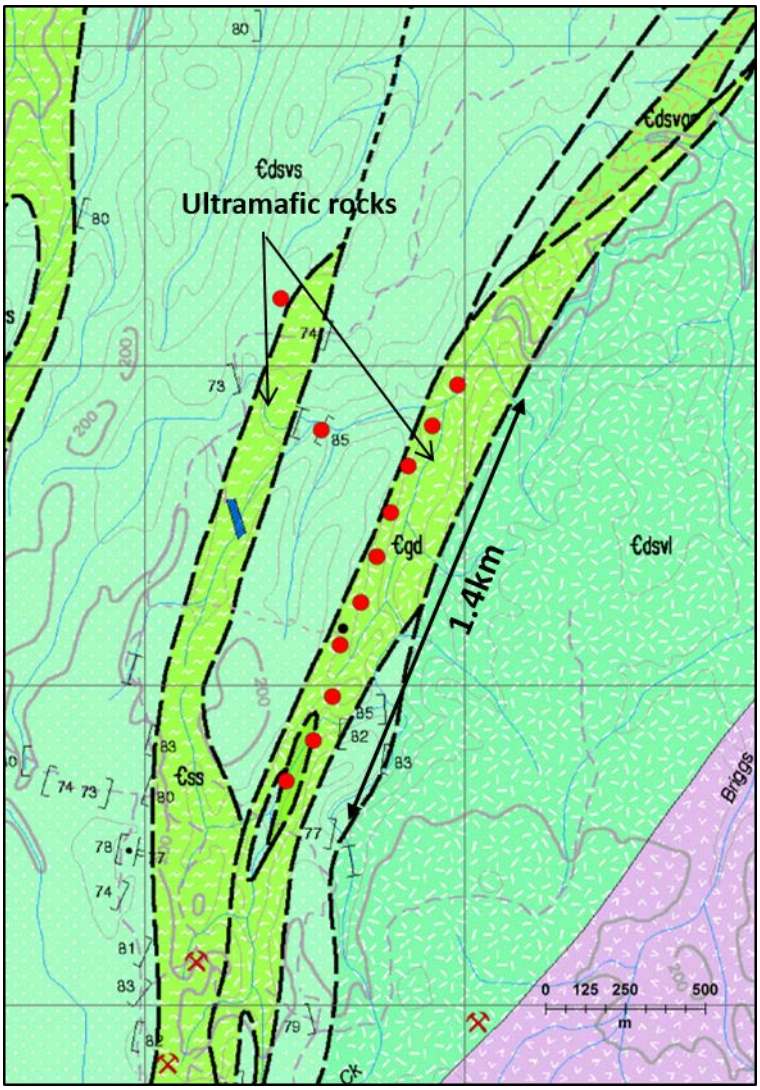

Figure 6: Henrietta Nickel Target - Geological map with priority EM targets (red circles)

1.5.2 Year 2 - 2014-15

Exploration undertaken during the 2nd year licence period included:

- Compilation and review of compiled geological, geochemical and geophysical datasets; target generation
- Track and line cutting (4.5km)
- Helicopter supported, geological reconnaissance of Birch's Inlet, Thomas Creek, Noddy Creek and Hill 99 areas.
- Soil and rock chip geochemical sampling
- Field reconnaissance mapping
- Processing of L8 Satellite imagery to identify potential areas of alteration and faults localising higher grade mineralisation

- Petrological studies
- Partial relinquishment of none core licence areas.
- Report compilation

The Thomas Creek Prospect has significant potential for economic copper-gold mineralisation and consequently field work during the year focussed largely on this area. A second focus area, accessed by boat, involved field mapping, soil and rock chip sampling of airborne EM targets at the Henrietta (Ni-PGE) Prospect and the Hill 99 (Cu-Zn-Au) Prospect areas in the north of the tenement group (Figure 7).

Historical high grade copper was re-discovered and sampled by Sherlock during the period at Thomas Creek. Below 50cm of peaty soil, fresh massive pyrite and abundant sulphides of copper over a 6 metre wide zone within weathered saprolitic bedrock were located. Geochemical analyses of the mineralised sap rock zone returned values ranging between 0.8% to 3.8% copper and 0.7 g/t to 1.3 g/t gold.

Petrological analysis of panned concentrate of the sulphides identified copper ores comprising predominantly of chalcopyrite but also include bornite, covellite and some chalcocite, with ubiquitous pyrite (Figures 8&9). Highly weathered host rock samples indicate the mineralisation occurs as a coarse stockwork of veins. The copper mineralisation under microscope shows evidence of extensive leaching and it is postulated this high grade zone is a remnant, and may indicate why the chargeable IP geophysical response becomes strong at about 100-200 metres where leaching is absent and primary copper mineralisation may still be present.

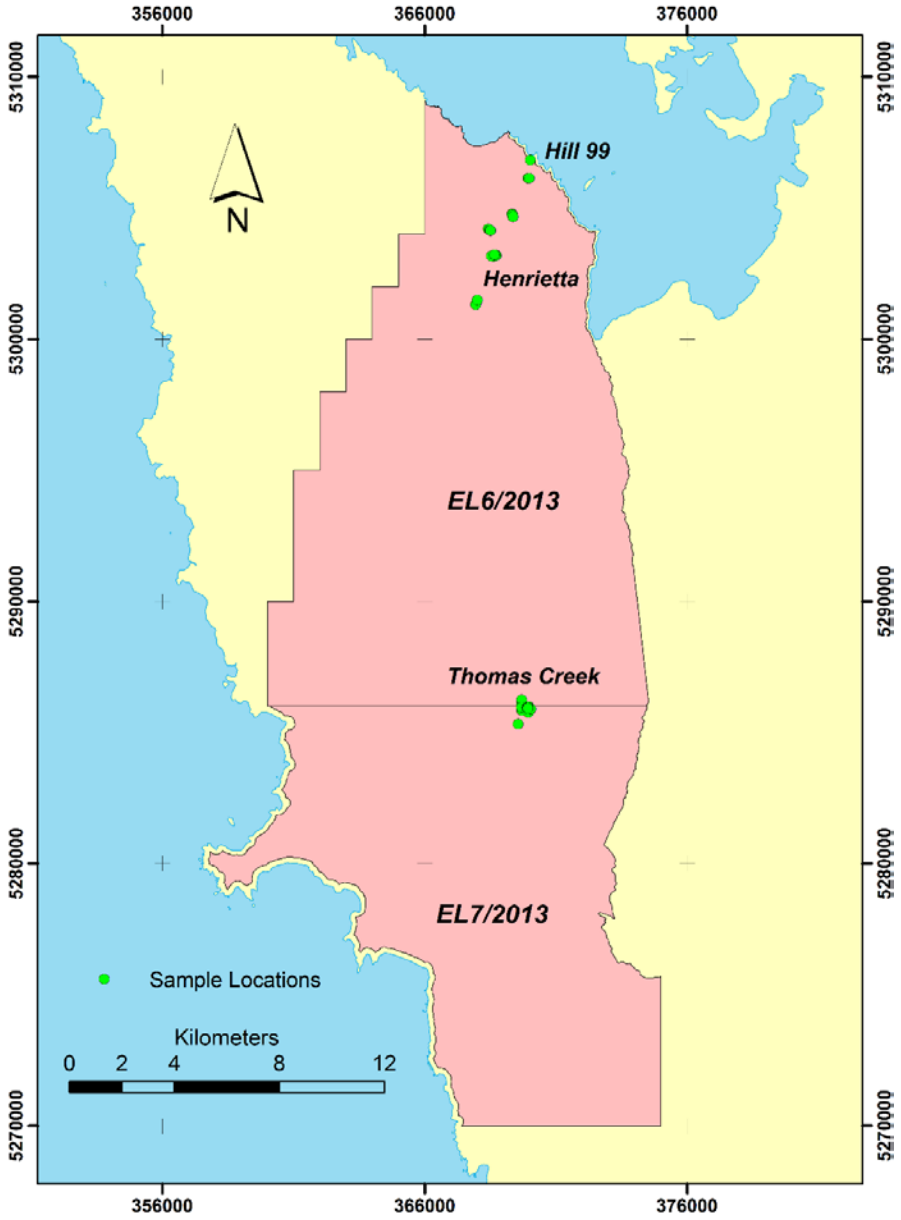

Figure 7: Sample locations – regional

Figure 8: Track Cutter, Ian Rogers, with a pan of copper and iron sulphides from a Thomas Creek sap rock sample.

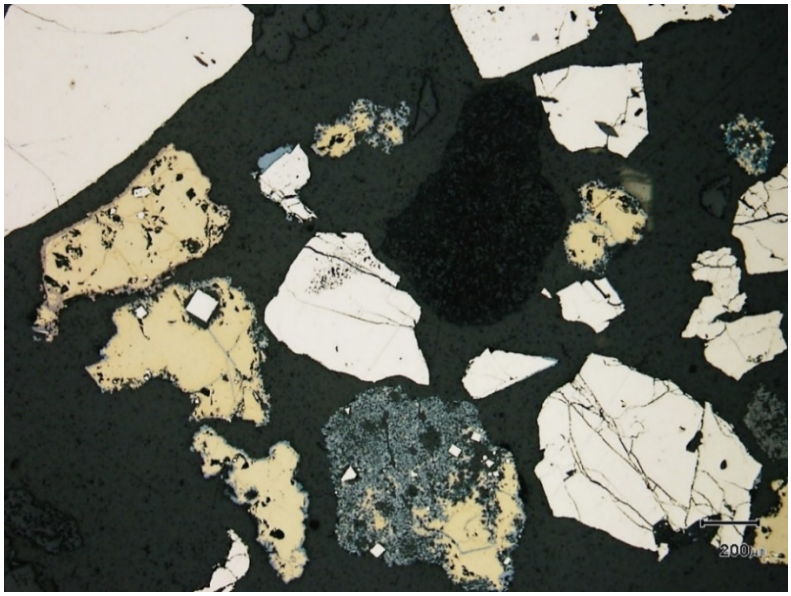

Figure 9: Pyrite (clear) and chalcopyrite (yellow) from panned concentrate sample at Thomas Creek. One chip of chalcopyrite (bottom, centre) largely oxidised to goethite. Note how fresh the pyrite is relative to the chalcopyrite.

Access to the Henrietta and Hill 99 Prospects sites required a 4.5 km of line cutting to establish a walking track along an old BHP exploration road which starts near the coast at Asbestos Point and continues southwards through to the Noddy Creek area. Access to this new trail was made by boat and a fly camp was erected about 100m inland from a small beach on the western side of Asbestos Point.

Portable XRF sampling of soils and rare rock outcrops has confirmed highly elevated nickel geochemistry along the 1.3 km late time EM anomaly at Henrietta Prospect ranging between 0.1 and 0.6% Ni. Spot sampling of rocks for lab analysis returned elevated Ni in line with XRF readings, but did not return elevated PGE's or copper. XRF readings taken from the Hill 99 area, following up on targets generated from the reprocessing of historical airborne EM surveys failed to detect significant base metal anomalism (Figure 10).

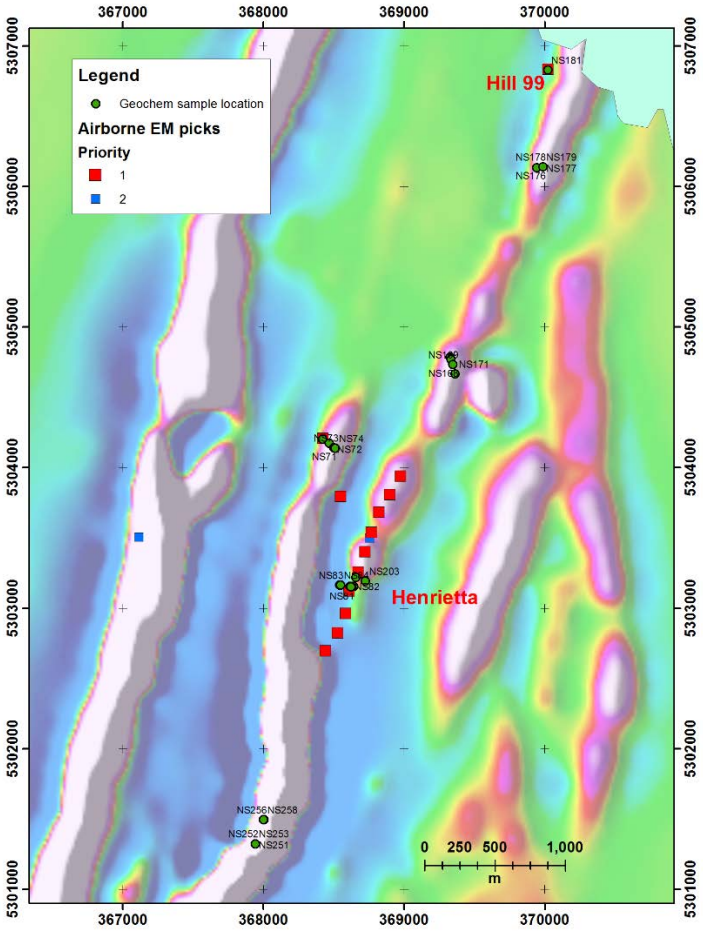

Figure 10: Henrietta / Hill 99 area, geochemical sample locations and airborne EM targets over 1VD aeromagnetic image

The highest copper and gold grades at the world-class Mt Lyell Copper-Gold Deposit 55 kilometres north of Thomas Creek are found to occur where orthogonal faults intersect Mt Lyell fault structure. The Mt Lyell fault may have originally been a major extensional basin edge fault controlling the deposition of younger Ordovician-Devonian aged strata found along its eastern side and similarly a fundamental conduit for the high sulphidation event generating the mineralisation. A similar juxtaposition occurs in the Thomas Creek area where Ordovician aged sediments form a prominent NW trending syncline (Timbertops syncline) and appear to be in faulted contact along the Northern edge of the Thomas Creek Prospect.

Appraisal of Landsat 8 satellite imagery over Thomas Creek has highlighted a number of major fault intersections and possible mineral alteration zones in the vicinity of known surface mineralisation (Figure 11).

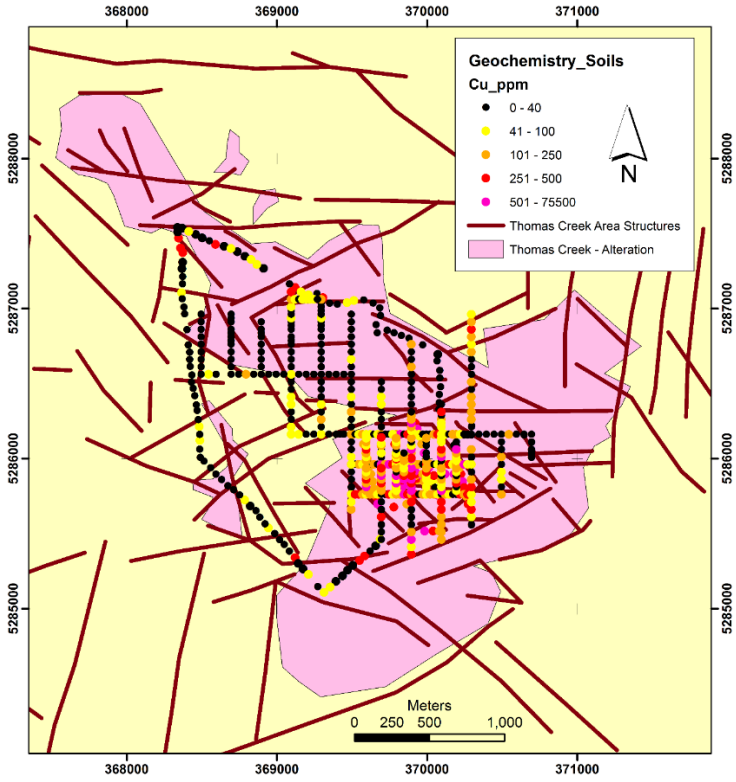

Figure 11: Alteration and fault architecture interpretation of Landsat 8 data over the Thomas Creek Area

1.6 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.

2. EXPLORATION COMPLETED DURING THE REPORTING PERIOD

Preparations ahead of the 2015/16 summer field season were made to undertake shallow diamond drilling, using a light weight portable drill corer. The drilling unit is cable of drilling BQ size holes to approximately 20 metres depth. Twenty holes were scheduled at an average depth of 15 metres per hole which will produce about 300m of core. The shallow diamond drilling is proposed across identified shallow copper mineralised areas and over the broader area of alteration at Thomas Creek. Pending results of the drilling further limited Ground IP and/or EM Geophysics may be undertaken at Thomas Creek. A Ground EM survey is planned for Henrietta prospect to accurately locate the source of the late time conductor to upgrade this prospect to drill ready status.

These ground works were later deferred due to the ongoing severe down turn in mineral exploration investment. In June, Sherlock held talks with Mineral Resources Tasmania on options to defer future exploration obligations. The Company subsequently applied for a formal exemption of conditions requesting an exemption of the year 3 work program and associated expenditure through to the end of the coming 2016-17 summer field campaign, allowing the Company time to secure the additional finance needed to complete the ground exploration works as originally planned.

Company and historical cobalt soil geochemistry was digitised and interpreted in ArcGis for the Thomas Creek Prospect. The compilation highlighted high cobalt credits with the identified copper and gold mineralisation. Cobalt values peaked at 0.36% and are coincident with the highest copper and gold grades (Figure 12). As a rule of thumb cobalt grades were recorded at approximately 1/8th the grade of copper. With recent renewed interest in cobalt based on projected growth in demand for lithium Ion batteries, the associated cobalt credits could be an important metal credit to the Thomas creek ores.

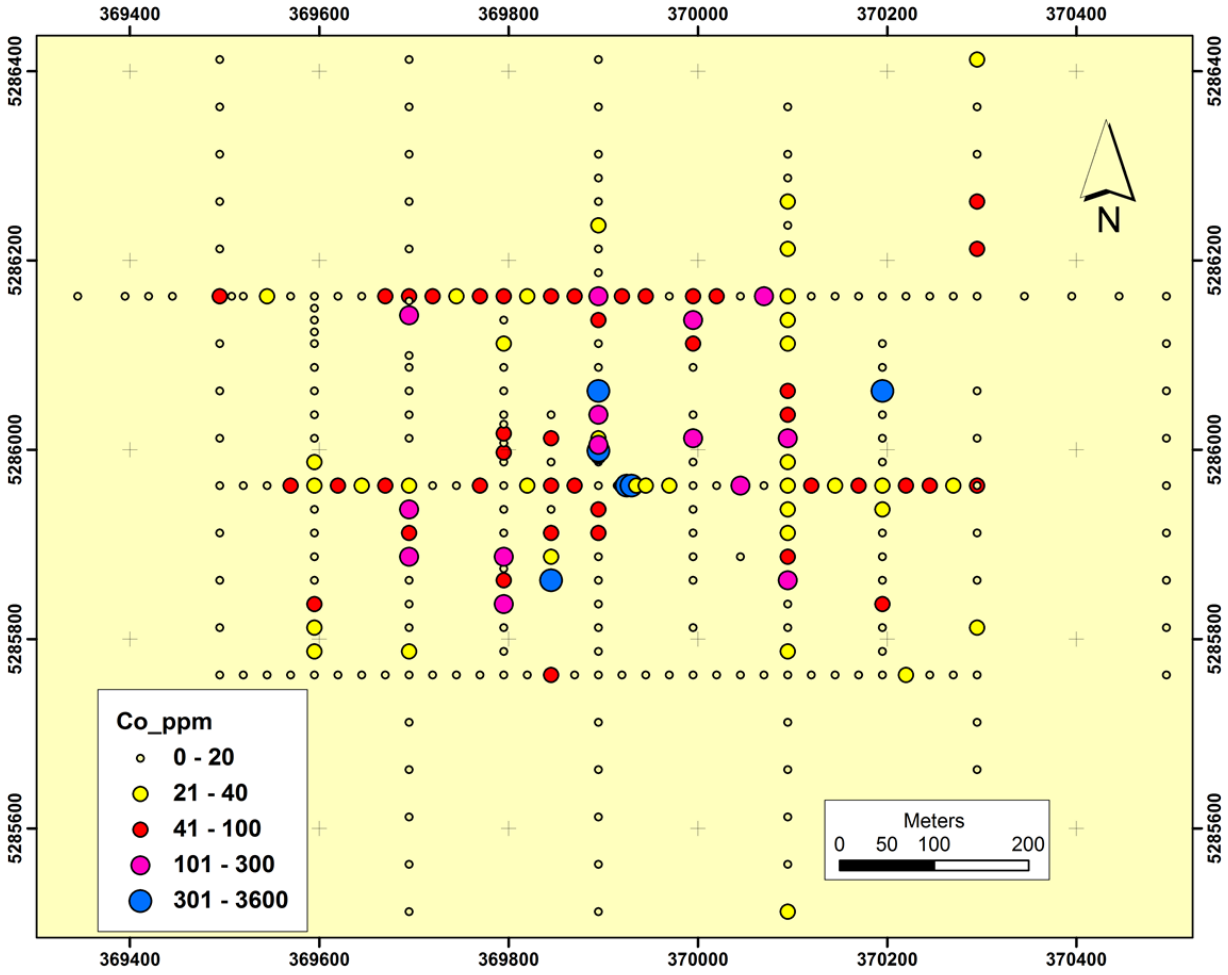

Figure 12 Thomas Creek Prospect – Cobalt in Soil

Historical gold soil geochemistry demonstrates elevated gold, east of the Noddy Creek Prospect area (Figure 13). It includes one stream sediment sample which returned 33 g/t Au. A

reconnaissance program of soil and rock chip sampling is planned in to follow-up the gold prospectivity in this area.

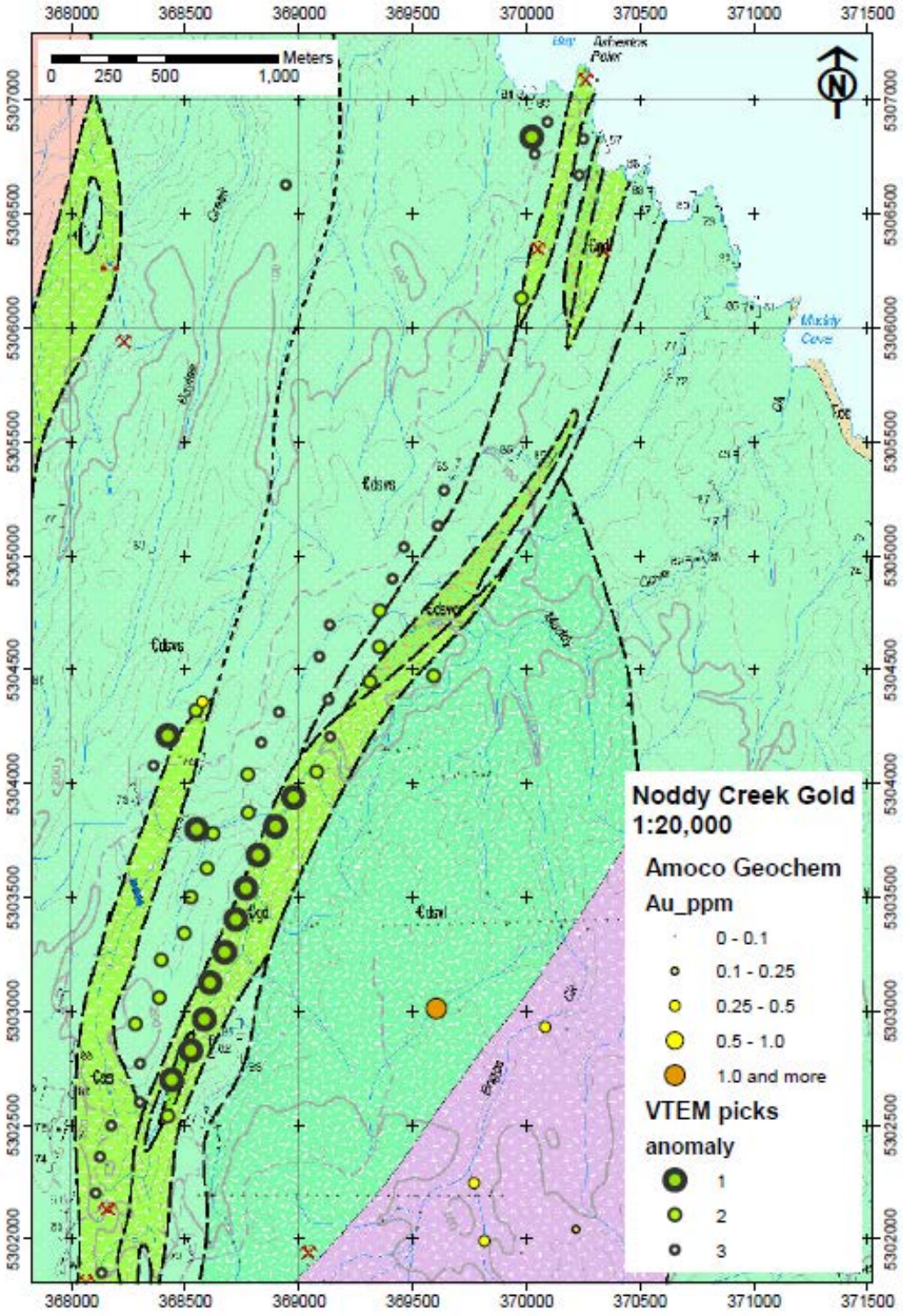

Figure 13 Noddy Creek area – elevated gold geochemistry.

3. CONCLUSIONS

High grade copper mineralisation has been identified as a result of follow-up of high copper values in soils identified by previous explorers at Thomas Creek. Geochemical analyses of the mineralised sap rock zone returned values ranging between 0.8% to 3.8% copper and 0.7 g/t to 1.3 g/t gold.

With the ongoing protracted negative investment climate for early stage mineral exploration in Australia, the Company has applied to defer the current work program till the end of the 2016-17 summer field season. High cobalt values up to 0.36% have been obtained in soil and weathered sap rock samples from Company and historical geochemical sampling at Thomas Creek.

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. No ground disturbing works were undertaken during the period.

5. EXPENDITURE

Total expenditure for activities on ELs 6/2013 & 7/2013 during the 2015-2016 period are provided in Table 2.

EL6/2013

Item	Total
Geology	$33,280
Geochemistry	$0
Geophysics	$1,480
Other	$16,194
Administration	$5,095
Total	**$56,049**

EL7/2013

Item	Total
Geology	$30,160
Geochemistry	$0
Geophysics	$1,480
Other	$11,558
Administration	$4,320
Total	**$47,518**

Table 2: Summary of exploration expenditure, Year 3, Sorell Project.

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