ANNUAL REPORT: EL13/2016 Sedgwick Bluff

FOR THE PERIOD ENDING APRIL 2019

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Distribution: Mineral Resources Tasmania

Copper Mines of Tasmania Pty Ltd

Geographical Extents MGA GDA94z55: minE 30500mE, maxE 38600mE

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Introduction

Exploration Licence EL 13/2016 was granted to Copper Mines of Tasmania (CMT) on 3rd April, 2017. This report details work completed over the exploration licence for the reporting period April 2018 to April 2019. The 23km^2 EL is located 5km NNE of the Queenstown township and abuts the northern boundary of CMT's mine lease ML9M/2013 which hosts numerous copper-gold-silver deposits, the largest being the Prince Lyell orebody. The Prince Lyell orebody provided the backbone of sustained copper production for over a century, supporting the township of Queenstown. The mine has been under Care and Maintenance since 2014. EL13/2016 is considered to be prospective for porphyry copper, VHMS polymetallic mineralisation and Henty style gold mineralisation with a number of prospective areas identified by geophysical and geochemical methods by previous workers. The geology of the lease shares characteristics similar to numerous deposits (economic or otherwise) hosted within the Middle to Late Cambrian Mount Read Volcanics.

There was minimal work on the Licence during the reporting period. Copper Mines of Tasmania has focussed efforts on the reopening of the Prince Lyell mine and evaluating opportunities for additional mineral resources. Work completed during the period was limited to a review and interpretation of work to date and minor reconnaissance soil sampling of targets on the mining lease which extend into the exploration area.

Co-ordinate system

Digital data supplied with this report is presented in MGA94 co-ordinates using the GDA94 datum.

Tenure and access

The lease is almost entirely on Crown Land with two small areas inside the northern lease boundary reserved by the Hydro-Electric Corporation as part of the Lake Margaret power scheme, and an area reserved as part of the Tyndall Regional Reserve on the Tyndall plateau around Mt Sedgwick.

A maintained gravel road used to access the Lyell Comstock and Tasman Crown deposits within the Comstock valley on CMTs mine lease 9M/2013 gives access to the southern and eastern portions of the Exploration Lease (EL), with the Lake Margaret road giving access to the western border of the lease. Access to areas inside the lease is non-existent with the exception of one unmaintained vehicle access road to the Beatrice prospect which starts within mine lease 9M/2013 and zig zags up the northern slopes of the Comstock Valley toward Mt Sedgwick up Itat Creek. This track crosses the East Queen river and is currently impassable.

List of related digital files

Exploration Work Type	**Filename**	**File format**
Annual Report	EL132016_30082019_Report.docx	*PDF*
File Verification Listing *(this file)*	EL132016_30082019_FL.xlsx	*xlsx*

Exploration philosophy

The area contains geology analogous to areas of know mineralisation in the southern Mt Read Volcanic Belt. These features are:

- The Great Lyell Fault
- Top of the CVC and overlying Tyndall Group sediments
  - The Lower Tyndall contains exhalative carbonate horizons
  - Argillic to Advanced Argillic alteration occurs close to or at the contact at numerous localities within the region.
  - Known host to at least two deposits within Mt Lyell Mineral Field (High sulphidation Cu-Au and Zn-Ag-PB VHMS) and possibly more.
  - Know to host mineralisation at Henty, Basin Lake and others
- Proximity to Mt Lyell Mineral Field- a large hydrothermal system
- Submarine Volcanic Environment

Primary targets include

- submarine exhalative and/or epithermal deposits at or near the Tyndall-CVC contact, and/or proximal to the Great Lyell Fault.
- Intrusive related mineralisation, including porphyry style systems believed to be related to the extensive phyllic and advanced argillic alteration zones which host known Mt Lyell Cu-Au-Ag deposits.

Geology

The geology can be considered in two main areas with corresponding prospects (Figure 1).

West Sedgwick

The West Sedgwick area lies in the west of the exploration lease from Agglomerate Hill at the head of the Comstock Valley to the lease boundary terminated at glacial moraine near the Lake Margaret Township. The rock package is mainly mixed feldspar+/-horneblende-phyric dacitic volcanics and volcaniclastics rocks of the Central Volcanic Complex (CVC) of the Mid to Late Cambrian Mount Read Volcanics and lie east of the dominant Tyndall range comprised of Late Cambrian Owen Group sediments. The CVC is also host to variably magnetic andesitic hyaloclastic lavas and subvolcanic intrusions. Occasional black shale horizons have been identified having produced IP anomalies in previous exploration works. The volcanics are structurally juxtaposed against the Owen Group sediments by the Great Lyell Fault. In the area around Zig Zag Hill rocks identified as Tyndall Group overly the CVC broadly indicating an east-facing stratigraphy. The Tyndall Group rocks are contiguous with stratigraphy within the north of Copper Mines of Tasmania's mine lease where the CVC-Tyndall contact is thought to host mineralisation of the Copper Chert deposit. Aeromagnetic surveys define the Tyndall stratigraphy, responding to detrital magnetite within some horizons.

Several prospective areas have been identified within the West Sedgwick geology. The Zig Zag Hill anomaly is based on early multiple geophysical and geochemical surveys and has been partially tested by drilling with results somewhat inconclusive. The Agglomerate Hill anomaly is a

geochemical and alteration anomaly believed to be at or close to the CVC-Tyndall contact and has seen some drilling completed with muscovite-pyrite alteration intersected with no significant mineralisation.

Lake Beatrice.

The Lake Beatrice area lies on the southern slopes of Mt Sedgwick and the Tyndall range. Mt Sedgwick is a remnant of Jurassic Dolerite sill intruded into Permian Tillite. The Permian rocks unconformably overly Owen Group sediments that form the Tyndall Range.

CVC and Tyndall Group volcanics, volcaniclastics and sediments are exposed on the northern slopes of the Comstock Valley (Corbett and Jackson, 1987). Lavas, volcaniclastic and black shale interpreted to be striking north host a large (partially magnetic) quartz porphyry body(s) that accounts for a large volume of the volcanics within this part or the exploration lease. Minor Tyndall like rocks have been mapped as slithers between the exposures of CVC and Owen Group rocks on the upper slopes of the Comstock Valley. The volcanics are overlain by a substantial thickness of glacial cover at the base of the valley.

The main prospective area within this part of the exploration lease is the Lake Beatrice/Mount Sedgwick Anomalous Zone where low levels of Pb-Zn-Ag and Au mineralisation is hosted within black shale and tuff horizons exposed and intersected by drilling in the Itat Creek area east of the quartz-porphyry body(s). Other potentially prospect areas have been identified close to the western boundary of the porphyry(s).

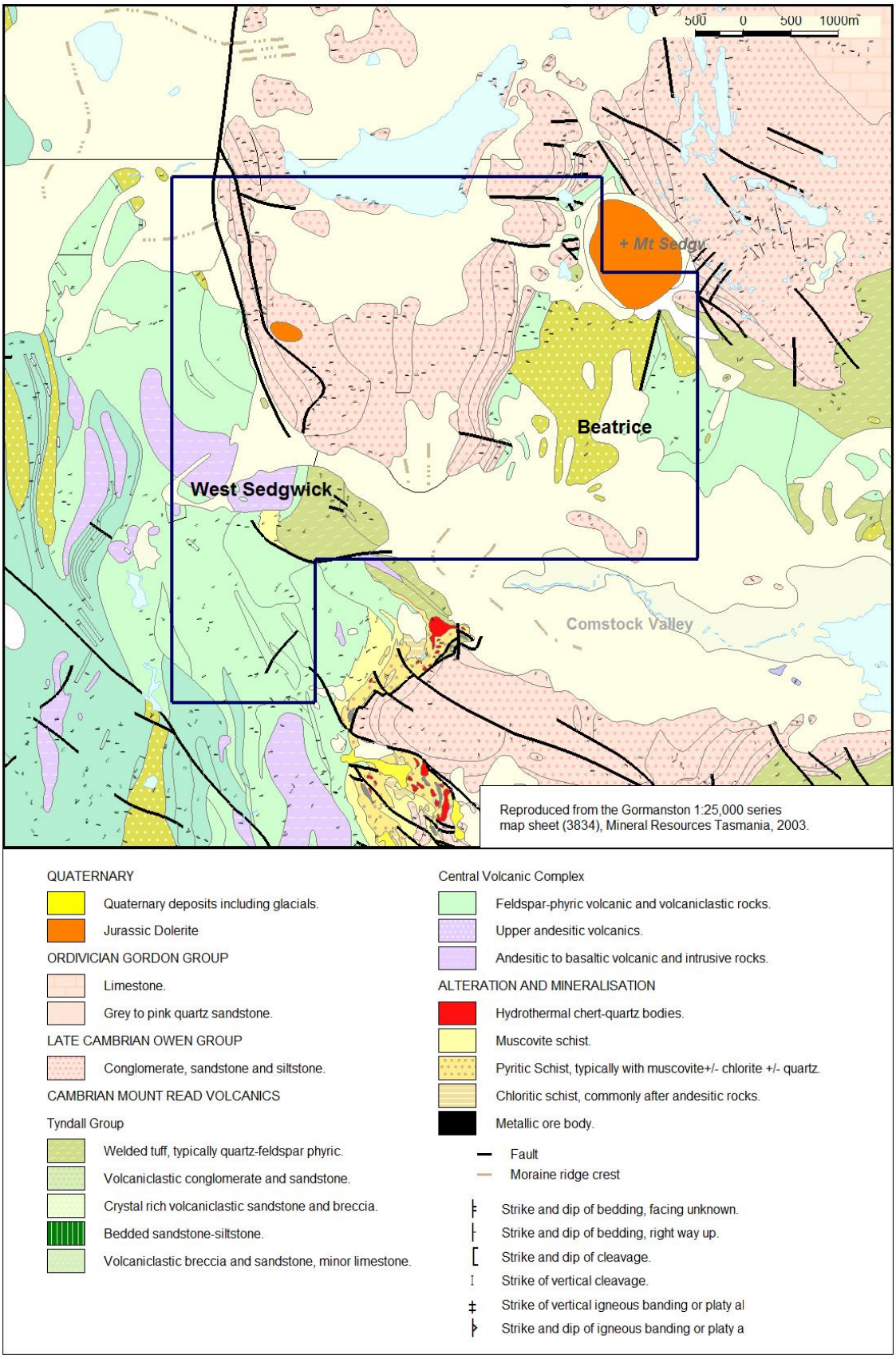

Figure 1. Geology of the Licence area

Previous work

A large body of work has been completed over the ground covered by EL13/2016 by multiple companies under a multitude of lease configurations.

West Sedgwick area

1958-1961 Rio Tinto Australia Exploration Ltd (RTAE)

A ground EM (TURAM) survey was completed detecting a weak 600m long linear WNW trending anomaly in the region 5347000mN, 381700mE referred to as the Zig Zag Hill anomaly. Weak lead in soil (dithizone indicator) was associated with the anomaly. Detailed mapping, stream and soil geochemistry and magnetic/gravity surveys were completed.

1961-1962 Rio Tinto Australia Exploration Ltd (RTAE)

An IP survey was completed over the Zig Zag Hill anomaly with little response

1965-1971 Pickand Mather and Co International

Stream sediment geochemistry and reconnaissance geology was conducted eventually focussing on the conglomerate-volcanic contact. A dipole-dipole survey identified an anomaly close to the Zig-Zag Hill anomaly.

1971-1976 EL41/71 Mount Lyell Mining and Railway Company

A large grid was cut extending from the Owen Conglomerate MT Read Volcanic contact west into the Yolande River sequence. The Lake Margaret Tramway Pyrite Lens was discovered. An IP survey was completed over the grid identifying 38 anomalies. Infill and extended grids were completed identifying a black shale horizon on the flanks of Crown Hill.

1977-1978 EL41/71 Mount Lyell Mining and Railway Company

Three diamond holes were drilled. WS1 (abandoned) and WS2 tested the Lake Margaret Tramway Pyrite Lens intersecting black shale with very low metal values (Cu, Pb, Zn). WS3 located approximately 1km north-east of WS1/2 tested a combined IP/geochemical anomaly intersecting a black shale horizon yielding 420-760ppm Pb and 185-1100ppm Zn. No significant sulphide or alteration zones were intersected.

1980-1981 EL41/71 Mount Lyell Mining and Railway Company

A large grid was cut within the Comstock Valley and an IP survey completed along with systematic soil and minor rock chip geochemistry. The eastern most lines (approximately north south) overlapped with the Zig Zag Hill anomaly. No significant chargeability anomalies were detected in the area however elevated Pb values were obtained over the TURAM anomaly of RTAE.

1985-1986 EL9/66 Goldfields Exploration Pty Ltd

The Zig Zag Hill anomaly originally identified by RTAE was revisited and SIROTEM was completed across the zone on three lines extended from the Comstock Valley Grid. A weak conductive WNW trending anomaly parallel with original EM anomaly was defined and tested by drill hole WS4 (229.8m) which failed to intersect any significant mineralisation.

1989-1991 EL102/87 BHP Minerals Ltd

A review and compilation of geophysics was completed by Bishop (1987) which provides a good reference to all pre-1987 geophysical surveys of the areas. BHP completed a UTEM survey with no significant anomalies identified.

1991-1993 EL102/87 RGC/BHP Minerals Ltd Joint Venture

The focus returned to the Agglomerate and Zig-Zag Hill areas. Grid mapping, rock chip and soil sampling was completed. 1:1000 mapping refined the geology at Agglomerate Hill. Drill holes WS5 and WS6 (380.8m) were drilled to further test the Zig Zag Hill anomaly previously tested by WS4. WS6 drilled through andesite and intersected several major faults (Sedgwick Fault). Beyond the last fault Lower Tyndall group rocks were intersected. The hole terminated within the Great Lyell fault assumed to be demarcated by Owen Group rocks. No Significant assay results were obtained.

1993-1995 EL102/87 RGC/BHP Minerals Ltd Joint Venture

A silica-sericite-pyrite zone was identified below Tyndall group sediments at Agglomerate Hill. Drill holes WS7 (499m) and WS8 (652.1m) were drilled to test this zone with WS7 intersecting zones of strong pyrite before intersecting the CVC-Tyndall contact. No base metal sulphides were present. Stable S-O isotope analysis showed that alteration was formed at low temperatures insufficient for transport of base metals. DHEM was completed in WS6 and WS7 with no significant off-hole conductors identified. WS8 failed to intersect sulphides or the CVC-Tyndall contact. No further work was completed and the area was relinquished in 1997.

1998-1999 EL6/98 Pasminco Exploration

Re-logging of previous holes was again completed. A Partial Leach soil geochemistry program was proposed.

1999-2000 EL6/98 Pasminco Exploration

A Partial Leach soil program was completed that did not resolve any anomalies.

Beatrice area

1975-1976 EL10/69 Mount Lyell Mining and Railway Company

Stream sediment sampling (SS43- 1100ppm Pb and 1130ppm Zn, S44- 906ppm Pb and 780ppm Zn) led to follow up mapping and sampling in the Itat Creek area.

1976-1977 EL10/69 Mount Lyell Mining and Railway Company/ Getty Oil Development Company Ltd

An access road was cut and the Beatrice Grid was established (43.5km). Mapping, C-Horizon soils and reconnaissance gradient array IP (38 line km) was completed. The IP survey identified six characteristic zones and 8 anomalies some of which were determined to be related to mapped black shale horizon(s), a porphyritic lava and siliceous tuffs contained pyrite.

1977-1978 EL10/69 Mount Lyell Mining and Railway Company/ Getty Oil Development Company Ltd

The Beatrice Grid was extended. Further C-Horizon soil sampling was completed (-80#) and assayed for Cu, Pb, Zn, Ag and Mn by AAS. A major geochemical anomaly was detected in the Itat Creek valley. Values ranged up to 510ppm Cu, 1.1% Pb and 1900ppm Zn associated with a black shale

horizon within volcanics. A smaller geochemical anomaly was detected toward the SW corner of the grid.

1978-1979 EL9/66 Mount Lyell Mining and Railway Company/ Getty Oil Development Company Ltd

Access tracks were excavated to the Itat Creek valley to what was then referred to as the Mt Sedgwick Anomaly Zone (MSAZ) on the Beatrice Grid. Mineralisation was recognised in the road excavations. An 80m section of the "western track" assayed 0.34% Zn, 0.22% Pb, 65ppm Cu, and 3.7ppm Ag. Rock chip sampling was conducted to refine the anomaly. Soil sampling was extended to the Western part of the grid. Three diamond drill holes were completed to test the MSAZ intersecting Pb, Zn, Ag mineralisation. Scintrex completed a number of geophysical surveys: EIP Gradient array, downhole three array, Schlumberge array, dipole-dipole and pole-dipole surveys.

1979-1980 EL9/66 Mount Lyell Mining and Railway Company/ Getty Oil Development Company Ltd

Two further drill holes were completed. MS4 tested north extensions to MS1 largely drilling down bedding. MS5 tested a chargeability anomaly intersecting black shales. 1065 C-Horizon soil samples were collected (-80#) at 30m centres. Further geophysical surveys were completed.

1983-1987 EL9/66 Goldfields Exploration Ltd (RGC/MLMRC)

In 1983 the MSAZ was reviewed concluding that mineralisation was similar to Red Hills and that drilling did not satisfactorily test the anomaly. The area was relinquished.

1987-1991 EL103/87 BHP Minerals Ltd

During 1989 BHP re-logged drill core and remapped the area and then completed a four loop UTEM survey. No significant conductors associated with the MSAZ mineralisation were identified. RGC joint ventured with BHP in 1991

1991-1997 EL103/87 RGC/BHP Minerals Ltd Joint Venture

During 1994 the area was again remapped and drill core re-logged. It was again determined that the MSAZ mineralisation was overwhelmingly hosted within black shales indicative of seafloor sulphide deposition at the stratigraphic horizon. In 1996 MS6 was drilled 500m south of existing drilling with no significant mineralisation indicated. Sulphur Isotope values were obtained from sulphides in MS1 showing values within the upper range of values from the Rosebery deposit.

1998-1999 EL20/98 Pasminco Exploration

Detailed 1:1000 mapping, re-logging of MS1-MS6 and a 580 sample Partial Leach program was completed. More geophysical surveys were conducted including a 4 line, 8.8km pole-dipole IP survey and a 2 line 4km orientation CSAMT survey. Drill holes MS7-MS10 were drilled targeting further mineralisation in the MSAZ with DHEM completed on the four drill holes. A western anomaly was identified in Partial Leach soil geochemistry which also conclusively defined mineralisation within Itat Creek.

1999-2000 EL20/98 Pasminco Exploration

An Honours Thesis completed by M. Hope (2000) on the MSAZ suggested that mineralisation at Lake Beatrice was not conclusively exhalative style VMS however showed mineralisation to be pre-

Devonian with Sulphur Isotopes supporting a reduced sea water source of sulphur. Drill holes MS11 and MS13 were completed targeting the MSAZ. MS 12 was drilled to test the western geochemical (Partial Leach) anomaly. It was concluded that no further exploration was warranted at the MSAZ although the western geochemical anomaly remained largely unexplained.

Combined West Sedgwick/Beatrice area

2001-2002 EL6/98 AurionGold Exploration Pty Ltd

Minimal work was completed. Re-logging of drill holes from Beatrice and West Sedgwick was completed. Insights into correlations of the stratigraphy with other areas of the Mount Read Volcanics are provided including correlations with the Red Hills and Henty stratigraphy. Tyndall Group rocks of the West Sedgwick area were correlated with the Henty area and were deemed to be inadequately explored. The lease was relinquished in 2003.

2004-2005 EL35/2004 Copper Strike Limited

It was determined that the Comstock Valley and several pyritic alteration zones in the north of the lease close to the Lake Margaret pipe line were inadequately explored. These zones are the Upper Haulage pyrite zone and the North East Pyrite Zone identified in historic IP and geochemistry surveys. A geophysical review was completed on helicopter electromagnetic (HEM) survey data completed as part of the Western Tasmanian Regional Minerals Program. 42 conductive responses were analysed with most rejected as representing overburden, transported cover of broad lithological units. One anomaly was identified as being prospective but is located on CMTs mine lease and likely cultural.

2005-2006 EL35/2004 Copper Strike Limited

A modified pole-dipole 3DIP survey over a 1x1km grid for 5 lines (200m spacing) was completed over the area located around the NE pyrite zone. A wide zone of chargeability was identified immediately west of the Great Lyell Fault. LMD01A (242.3m) was drilled through unaltered and altered volcanics, through the Great Lyell Fault and terminated in Owen Group sediments. It was deduced that the chargeability anomaly was likely due to 1-2% pyrite in some units. No significant mineralisation was intersected.

2006-2009 EL35/2004 Copper Strike Limited

Little further work was completed and the lease was relinquished.

2010-2015 EL28/2009 Bass Metals Ltd

The ground was held by Bass Metals however work focussed on the Basin Lake prospect north of EL13/2016. Litho-geochemistry and SWIR alteration studies were completed on WS and MS series drill holes in addition to the Basin Lake drillholes. The most significant outcome for EL13/2016 was the determination that LMD01A had the most anomalous Bi-Te-Se pathfinder geochemistry and alteration intensity signature within the complete combined Basin Lake, West Sedgwick and Lake Beatrice dataset. It was recommended that more drilling be completed around LMD01A.

2017-2018 EL13/2016 Copper Mines of Tasmania

Work completed included the acquisition and processing of a helicopter airborne electromagnetic survey (AEM) and aeromagnetics. The survey was flown by CGG Aviation Australia's HeliTEM-35C

system (4ms/25Hz) and flown in conjunction with a survey completed on CMT's mine lease 9M/2013. A total of 378.9 line kilometres of the survey was flown over EL13/2016. Lines were spaced at 75m and flown at 055 (MGA) orientation. Results of te geophysical surveys have been modelled and interpreted by CMT and external consultants and reported earlier.

Work completed during the current reporting period

Work during this reporting period was limited to compilation and review of previous exploration. There was minimal field work during the period. Copper Mines of Tasmania's principal focus has been on the restart of the Mount Lyell mine.

Results

Following are images of the most recent CMT heli EM and mag surveys. There is an association of known disseminated chalcopyrite mineralisation hosted within the large Mt Lyell phyllic – advanced argillic alteration corridor with late arrival (deeper source?) Tau decay grid anomalies as in Fig 2 below. There are no such anomalies on the EL.

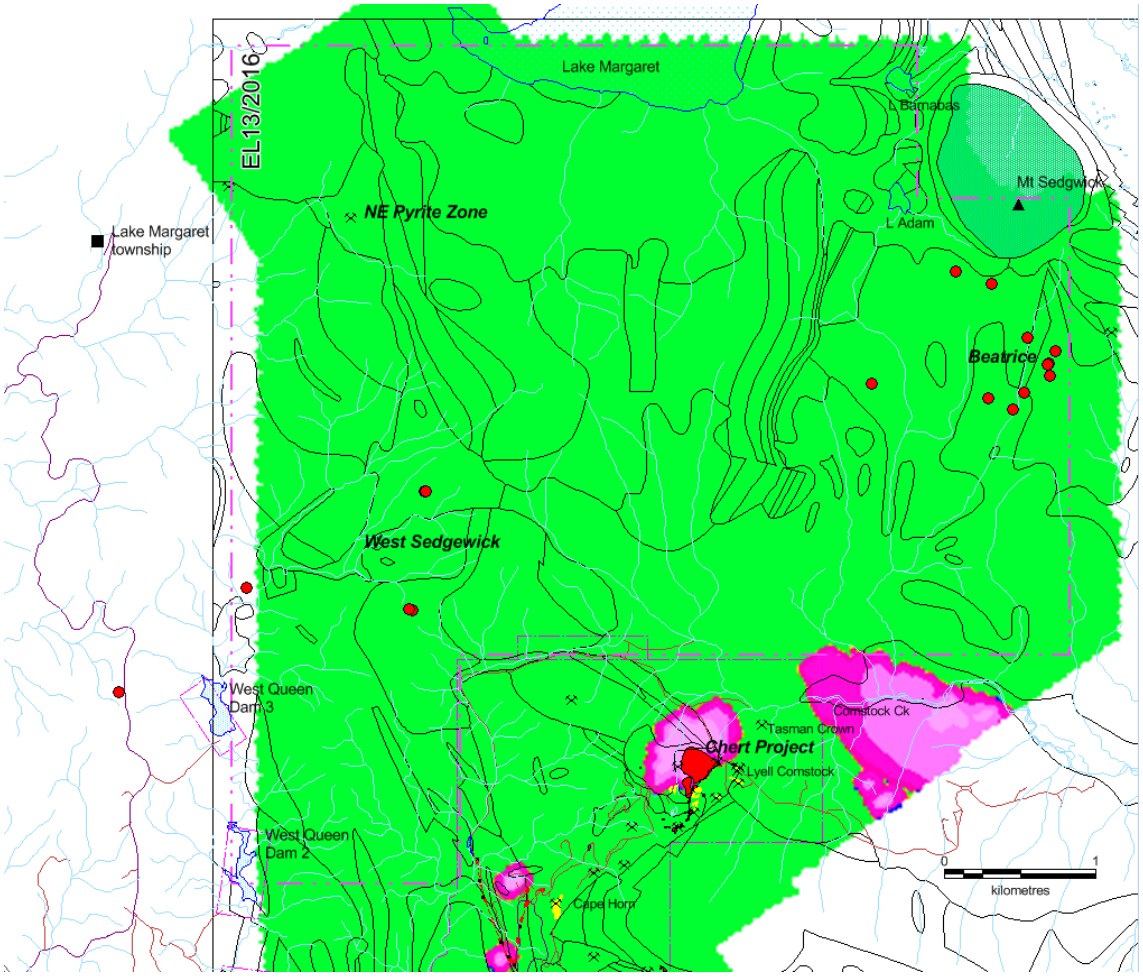

Figure 2. Airborne electromagnetic survey, Tau Decay Grid for late arrival times.

The late arrival Tau decay grid anomalies may be reflecting deeper, potentially mineralised intrusions and source of the altering fluids. The EM survey was designed to identify known Mt Lyell style mineralisation, and failed to respond to known massive base metal sulphide lenses at Comstock and Tasman Crown. The lack of EM anomalies on the EL does not reduce the licences potential for VHMS or stratigraphic - structurally controlled mineralisation styles such as found at Henty or low sulphide porphyry systems.

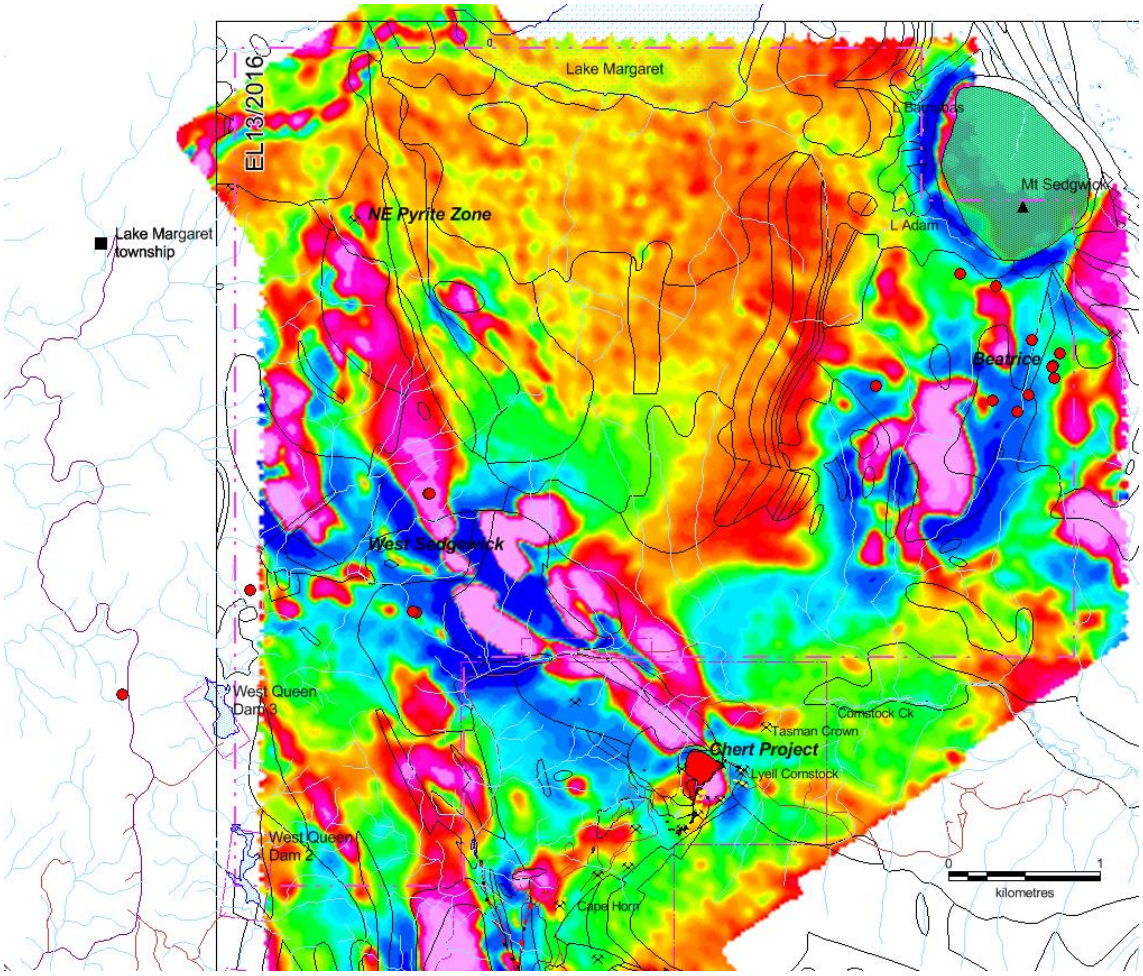

Figure 3. Heli aeromagnetics and mapped lithology boundaries.

Heli aeromagnetics have provided a map of the detailed distribution of highly magnetic features as shown in figure 3. Some of these appear to be associated with known alteration and mineralisation on the EL. There is poor correlation of magnetic features with mapped and interpreted geology. It is hoped that the magnetics can be used to refine the geological interpretation. A number of discrete, discordant aeromagnetic low features have also been identified and will be assessed for the potential of magnetite destructive alteration associated with intrusives.

Expenditure

There was minimal expenditure during this reporting period.

Activity	Expenditure ($)
Administration	$6,101
TOTAL EXPENDITURE	**$6,101**

Recommendations and planned expenditure

The lack of HeliTEM responses detected within EL13/2016 does not preclude the detection of economic mineralisation but provides reasonable grounds to eliminate any presence of Mount Lyell style(s) mineralisation at least where host rocks are not covered with glacial cover or, mineralisation is not close to surface. Therefore the exploration efforts within EL13/2016 should remain focussed on detection of potentially economic Pb-Zn-Ag-Au massive sulphide deposits, intermediate epithermal or a Henty analogue at or close to the Tyndall-CVC contact and intrusive related Cu-Au mineralisation.

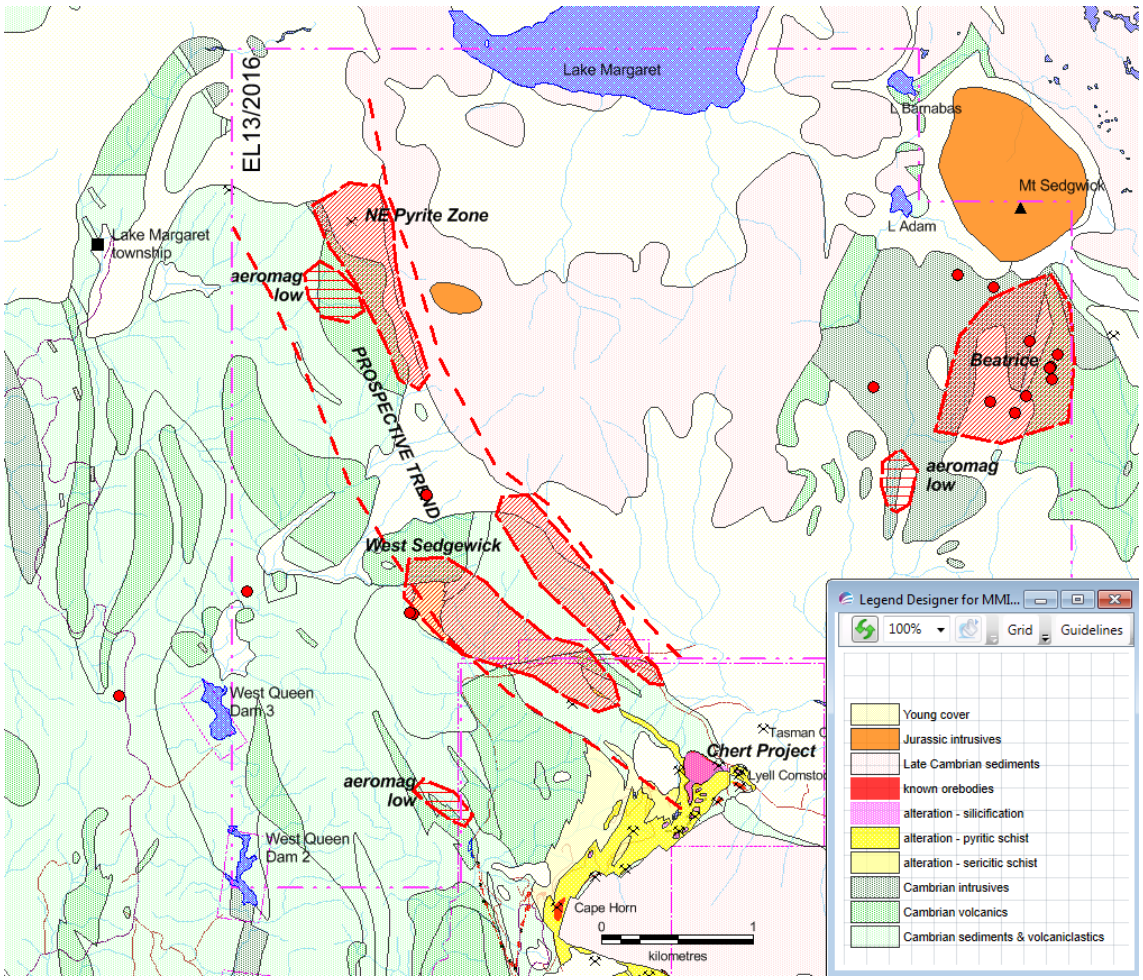

Figure 4. Exploration target areas on simplified geology.

Beatrice

Although the previous focus has been on the pyritic black shales known in the area, the description by Pasminco of pink feldspar intrusives with magnetite and haematite at the Beatrice dome in an area of complex helimag anomalies, combined with significant intercepts of mineralisation hosted within fine grained volcanics (for example MS11 intersected 4.6m with 2.4g/t Au, 2.1% Pb, 2.2% Zn and 24g/t Ag hosted within vein breccia and banded veins) make this a target worthy of more work. Also the western "PL" anomaly coincides with an IP anomaly. MS12 failed to explain either and therefore further investigations are warranted initially with a site inspection.

West Sedgwick

The north-westerly trending corridor which contains the upper CVC – Tyndall contact in proximity to the Great Lyell Fault and known areas of pyritic argillic alteration (NE pyrite & West Sedgewick) will be further explored. This position hosts the Copper Chert Cu resource on the ML, and has recently been shown to be associated with soil geochemical and CSAMT anomalies at West Comstock. It is proposed to prepare a grid along this prospective zone, working out from known mineralisation and anomalies on the Mining Lease. This will be mapped, soil sampled and tested with CSAMT, with the aim of identifying drill targets within the next reporting period.

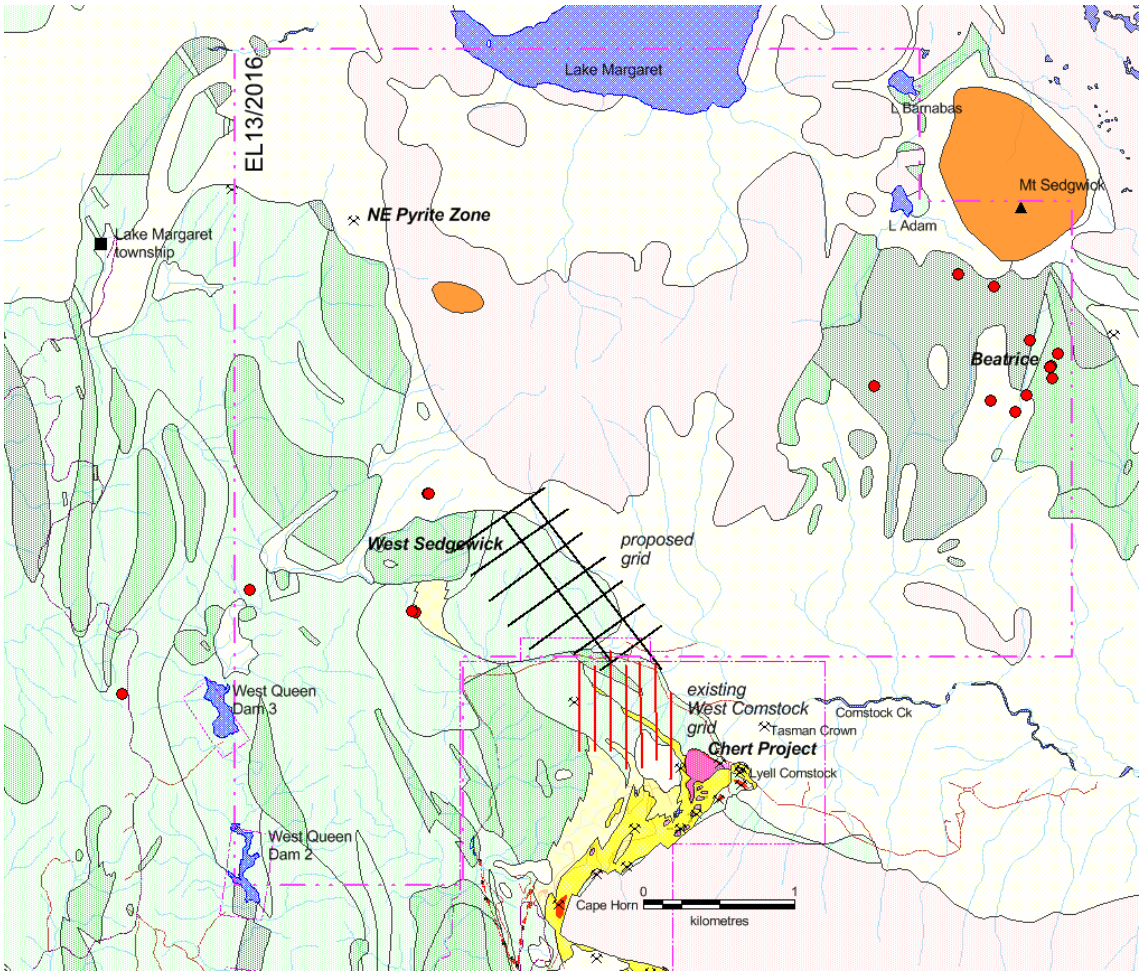

Figure 5. Proposed West Sedgewick grid and known prospects on simplified geology.

Summary of Proposed Expenditure for the next period.

Activity	Expenditure ($)
Gridding	25,000
Mapping (soil & geology)	50,000
Soil sampling	75,000
CSAMT survey	150,000
Geol & Geophys interpretation	50,000
Administration	15,000
TOTAL PLANNED EXPENDITURE	**365,000**