Annual Report on Loyetea EL12/2014

For:- Edrill Pty. Ltd.

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10th September, 2017

Summary

This third Annual Report for Loyetea (EL12/2014) details rock chip sampling and ground magnetic exploration activities for the period 29/7/2016 to 29/8/2017. Edrill continued to target magnetite, Sn, W and basemetal mineralisation during the tenure year.

Infill ground magnetic surveys (~7.5line Km) were undertaken by Edrill, mostly near and ESE of the Peak Hill / Redwater Creek area to better characterise magnetic anomalies and magnetite distribution. 9 rock chip samples were collected from various lithologies and 6 C-horizon soil samples tested iron oxidised zones. No significant basemetal analyses were returned. Data collation included capture of raster geology from a past report and improved GIS based understanding of the area.

Soil sampling followed up a roughly linear NE trending ferruginous zone south east of Peak Hill. Geochemical assessment, particularly Ti/Zr, indicates a basalt protolith. Oxidation along a syn/post Tertiary fault is a possible origin.

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Introduction

This is the third annual report for Loyetea (EL12/2014; 83^{2}km), granted to Edrill Pty. Ltd. on 30/7/2014, details exploration activities for the period 29/7/2016 to 29/8/2017. The tenement is located in NW Tasmania, approximately 20km south of Burnie (Figure 1). The datum used in this report and appended digital data files is GDA94.

Key exploration targets are granite related Sn-W magnetite skarn, as well as skarn and vein Pb-Zn mineralisation. Some VHMS potential also exists within the Mount Read Volcanics mapped in the licence area.

Edrill have previously drilled 2 diamond drill holes to-date on the tenement. Results for rock chip sampling and further infill ground magnetics in the Peak Hill and Lunn's Farm area's by Edrill is detailed. Historic drilling data was digitised and incorporated with available GIS data to assist with further prospect and regional interpretation. Only cursory field geology was undertaken and more work is required to elucidate the apparently complex structure of the area.

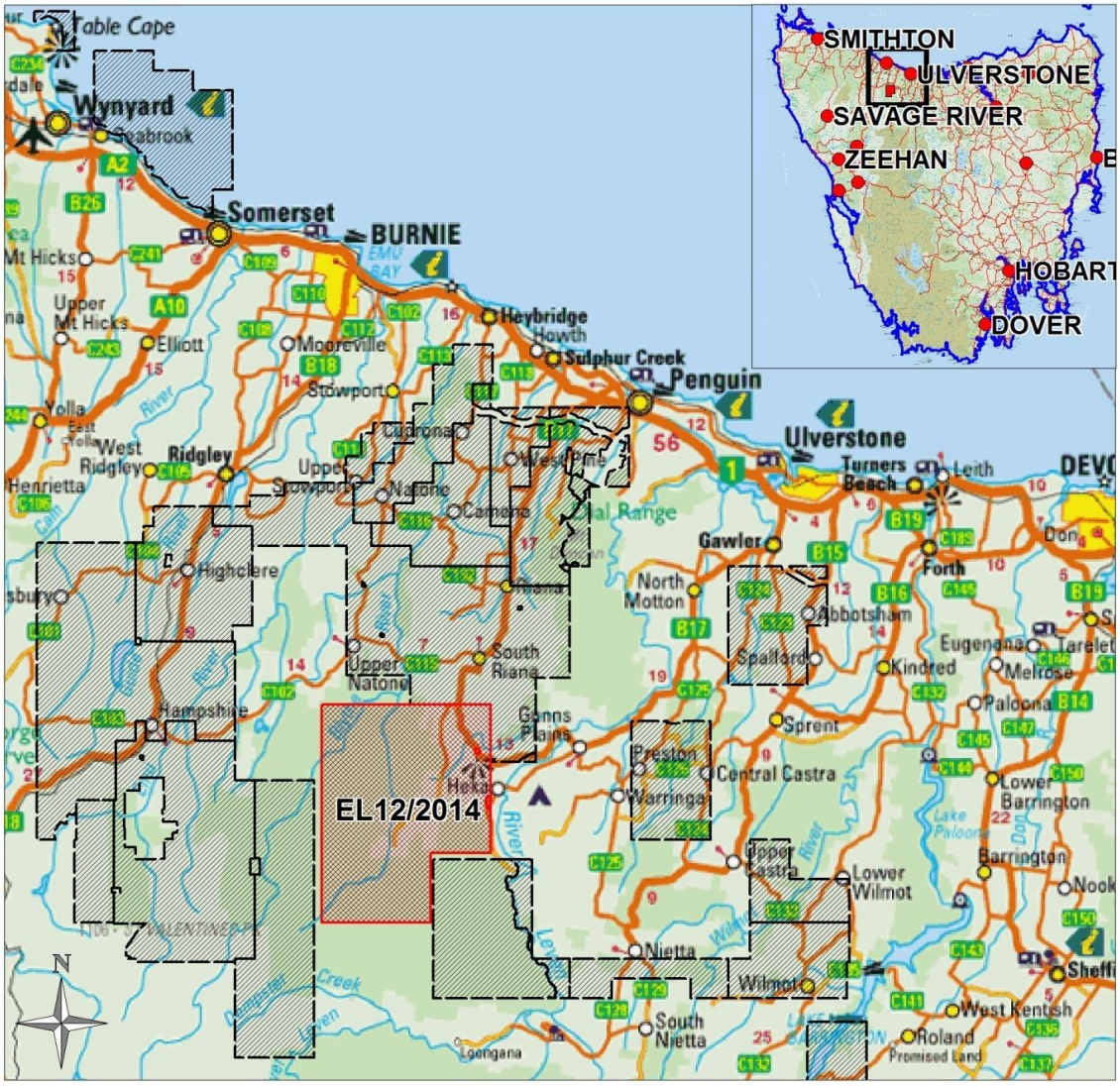

Figure 1: Location of Loyetea EL12/2014.

Review of Previous Work

Previous work undertaken prior to the granting of Loyetea EL12/2014 is detailed in Murphy and Bates (2009) and Hansen (2014). This report partly re-iterates these details, adding information pertinent to the current investigation. Significant geophysics of note is the Comalco Redwater Creek IP and Bass Metals commissioned VTEM survey extending across, as well as north and south of the tenement.

Comalco – Shell 1977 - 1981

Weste (1979) reported rock chip and auger sampling, with Sn to 490ppm and 1500ppm W in the latter. Comalco undertook grid based ground magnetics and IP in the Redwater Creek area.

Comalco drilled five diamond holes at Loyetea (RED1-5; see Figure 10) exploring for F, Sn & W. Comment and results follow:-

In RED1, analysis for Sn reached 150ppm and W reached 55ppm. Zn to 700ppm was returned. No other appreciable results were returned. There was poor core recovery over parts of the drill hole. The upper portion of the hole was logged as Tertiary breccias, whereas reported strained fabrics in clays and magnetite pebbles enables re-interpretation of these rocks correlating with the Puffers Creek / Loyetea Road fault zone.

Analysis in RED2 was more encouraging with Sn reaching 430ppm and W 760ppm. Zinc commonly hovers around 0.1% in most samples. Re-interpretation as largely faulted in the upper portion of the hole is warranted. Closer to the granite at depth is what reads as faulted but possibly near insitu magnetite then calc-silicate altered skarn. Notably the sediments adjacent to the granite in the Loyetea Road section are missing.

RED3 drilled Tertiary Basalts with basal deep lead deposits, over highly weathered granite. The granite base is faulted and 2m of limestone at the end of hole may be a fault clasts(?). Hole terminated in limestone. No sampling was undertaken but subsequent samples reported by Banwell (1982) were very low for Sn, W, Cu, Pb and Zn. Banwell (1982) notes that this hole was terminated early, prior to intersecting the magnetic anomaly on 6100N. RED5 tested the magnetic anomaly missed by RED3.

Banwell (TCR82_1784) reports further investigation of the Redwater Creek and Laurel Creek West prospects. Included further gridding extending south on the Redwater Creek Grid, but no soil sampling was undertaken due to extensive Tertiary basalt cover. RED4 testing an IP chargeability anomaly, was extensively sampled top to bottom of hole and returned nothing anomalous; Sn max 40ppm. No Fe analysis were undertaken. The basal 75m of this 349.6m hole possibly drilled down a fault.

Significant analysis from RED5 include 450ppm Sn, 150ppm W, 450ppm Zn, 0.23pm Au, 230ppm Bi and 31.8% Fe from magnetite skarn (167.8 to 168.2m). Fe values ranged from mostly 5 to 11, peaking at 34.4%. RED5 had a significant swing in azimuth toward holes end (261 to 283), which may have been magnetite influenced. It's unclear if RED4 & 5 surveys are reported as true or magnetic north; actual drill logs are scantly reported.

Soil geochemistry was undertaken at Laurel Creek and Laurel Creek West with analysis for Cu, Pb & Zn. Ground magnetic at Laurel Creek West revealed a narrow anomaly targeted by drill hole PD1. This work is yet to be assessed.

Jervois Mining 1997

Jervois drilled 4 RC holes for 378m with a best return of 20m @ 0.17% Zn from RW4. Drilling was problematic with high water flows, clay zones and cavities. Significant sample contamination was reported. At the Pilbeam Road Prospect, a target below and slightly north of RW3 was suggested to follow up anomalous Zn. RW1 returned little basemetal or Sn and W.

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Drill hole LOY15-001 (EOH 500m) targeted a ~250m deep VTEM conductor, identified by Bass Metals (Murphy and Bates, 2009) as a potential copper rich skarn. No significant mineralisation was encountered (No. Analytical Samples = 6), however weak skarnification and calc–silicate alteration was evident immediately beneath the targeted 250m deep zone (~265 to 290m) at the down dip end of the modelled conductor.

Drill hole LOY16-002 (EOH 169.6m) targeted a chargeability anomaly, ground magnetic high and rock chip of >50% Fe, including minor Sn (97ppm) and Zn (909ppm). Minor disseminated pyrrhotite (locally 2%) associated with weak pervasive silicification corresponded roughly with the IP chargeability anomaly at surface. No significant analysis were returned.

A key geological outcome was the identification of a very large fault zone (Lavell's Fault) bearing granite and magnetite clast breccia along Loyetea Road in the Redwater Creek Prospect area.

Hole_ID	From (m)	To (m)	Interval (m)	Sn_ppm	Zn_ppm
LOY15-001	399.8	400.8	1	0	547
LOY16-002	7.6	8.6	1	26	1220
RED1	58.29	60.7	2.41	108	664
RED2	2	6	4	110	500
RED2	25.7	38.8	13.1	216	1152
RW-1	68	72	4	8	674
RW-1	118	120	2	0	784
RW-2	75	76	1	18	1320
RW-3	16	20	4	25	538
RW-3	24	28	4	10	762
RW-3	52	72	20	14	1702
RW-4	26	38	12	24	962
RW-4	46	54	8	12	924

Table 1: Significant intervals in drill holes to-date with 500ppm Zn cut off. Note Edrill's LOY15-001 and LOY16-002 were only partially sampled.

Geology

Cambrian aged Tyndall Group volcanics representing the top of the Mount Read Volcanics (MRV) outcrop in the southern and central NE portions of EL12/2014. Overlying is an apparently complete sequence of Cambro-Ordovician Owen Group siliciclastics extending up to Moina Sandstone correlates, overlain by Gordon Limestone. The Housetop Granite which extensively covers the central and NW portion of the tenement belongs to a suite of tin bearing I and S type granitoids of Middle Devonian to Early Carboniferous age. Potential for granite intrusion related greisen and magnetite (+/-Sn – W) skarn mineralisation within the Gordon Limestone is known. Tertiary basalt outcrops within a NE aligned corridor, obscuring the potentially mineralised granite contact in the Redwater Creek Prospect area. The geology of the Loyetea Tenement Area is shown in Figure 2.

Known geology and interpretation indicates that the Loyetea area is structurally complex. A NE trending lineament along the south eastern Housetop Granite margin is interpreted as having significant influence upon patterns of faulting and folding in the area. Key is the development of a structural intersection in the Redwater Creek / Peak Hill area, where a NW aligned fault trending through the Loyetea Peak area intersects the NE trending lineament and deflects to a major NNW aligned fault zone passing into the granite to the north. Dextral fault offsets are apparent.

Interpretation suggests the magnetite mineralisation in the Redwater Creek to Peak Hill area is located at a structural flexure where intersecting NW and NNW faulting coincides with an inferred NE trending lineament along the south eastern Housetop Granite margin, forming a triple point junction. The Lavell Fault identified in the Loyetea Road vicinity may in part represent a linking damage zone within this dextral strike slip fault regime, with some strain taken up on granite margin parallel NE aligned faulting. A basin fold within the Gordon and Owen groups likely developed in response to at least two deformations, predating extensive late stage brittle faulting of likely Tertiary age which is clearly evident in drill core.

Work Conducted

Edrill have undertaken general reconnaissance, soil and rock chip sampling, as well as infill ground magnetics on EL12/2014 during the third tenure year to 29/8/2017. Focus has been in the Redwater Creek and Puffers Creek areas. The author's participation includes a 1day geological field visit, largely comprising a traverse up Puffers Creek. Historic mapping and recent geological field data were partially digitised / compiled for incorporation with available GIS data enabling ongoing prospect and regional interpretation.

Surface Geochemical Sampling

Edrill collected a total of 15 surface samples. This included 9 composite rock chips and 6 augered C – horizon soil samples. Four soil samples extended ~400m along an iron oxidised zone SSE of the Peak Hill Road Prospect (See Figure 3), with a further two individual samples located SE of the later. Several of Edrill's rock sample locations were later field verified by the author (No's. 50036, 50038 & 50039). No significant basemetal or Sn analyses were returned.

Digital data is appended in EL122014_201708_02_SG_1.xls with original laboratory data as pdf's.

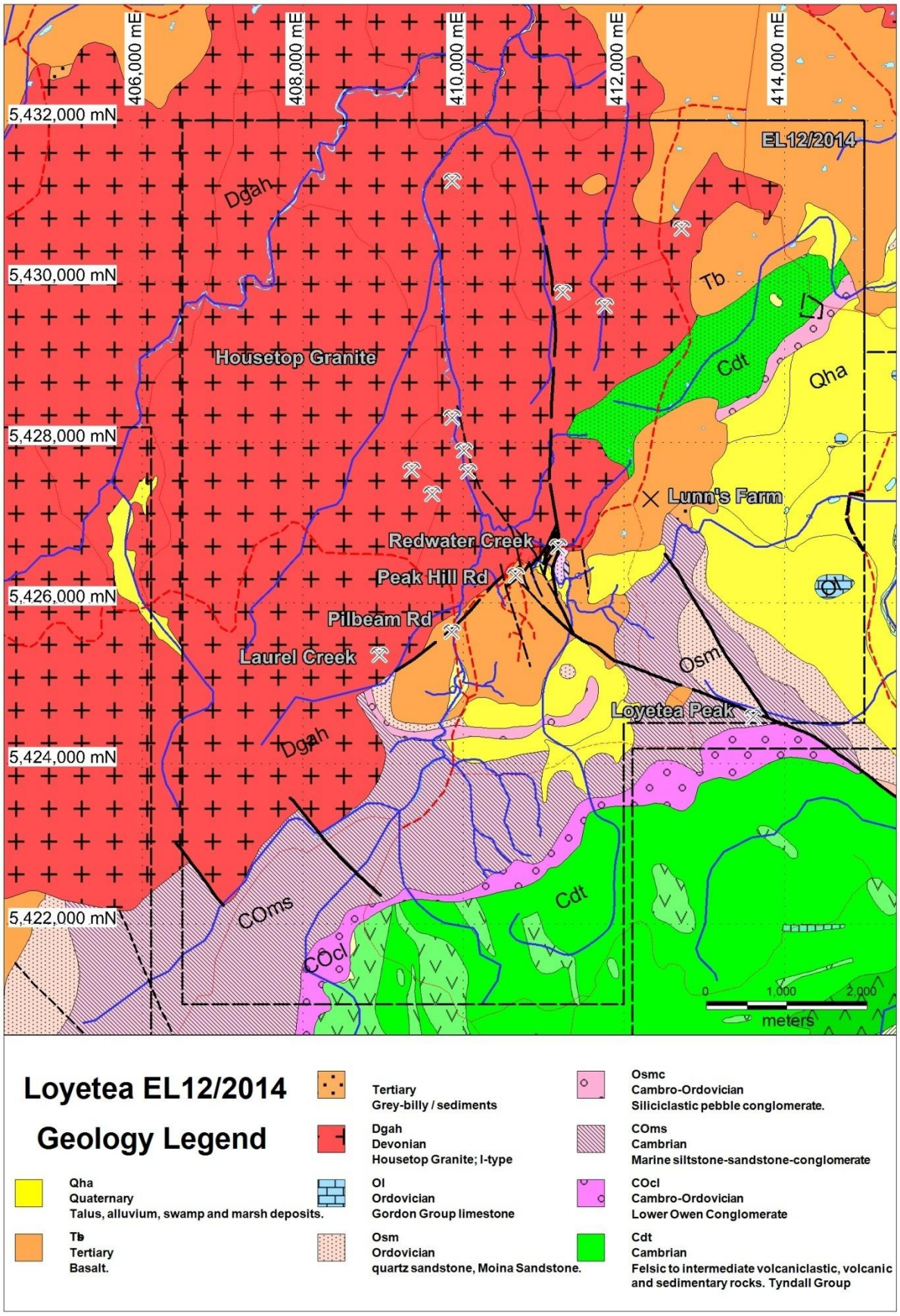

Figure 2: Geology of the Loyetea area highlighting key prospects (Geology modified from 1:25,000 Mineral Resources Tasmania digital geology).

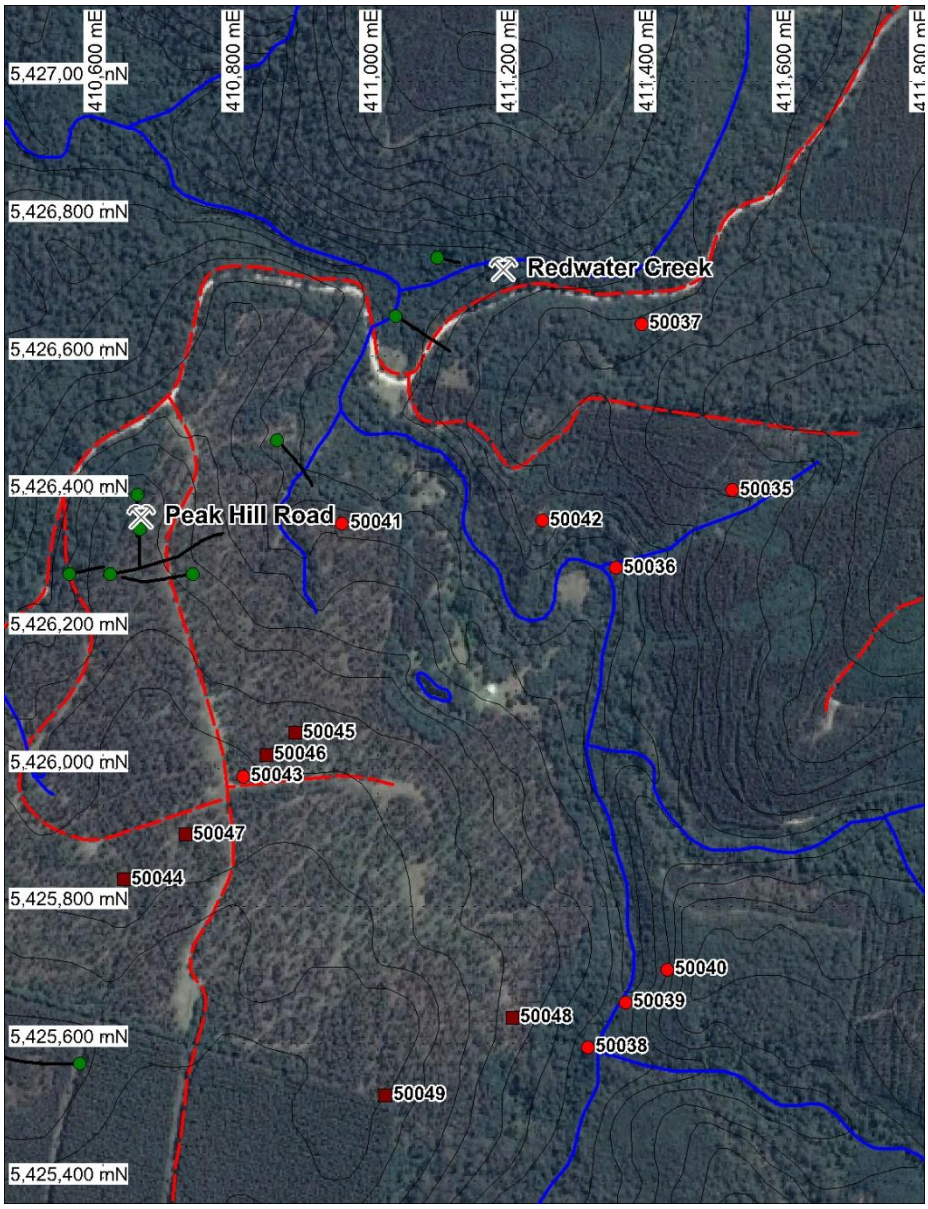

Figure 3: Edrill rock chip (red) and soil (brown) sample locations over Google Earth image.

The 6 C – horizon soils (50044-9) returned elevated ~12.5% Fe across all samples. The consistently elevated Cr, Ni and Cu of ~350ppm, ~120-185ppm and ~50-60ppm, respectively, combined with Ti/Zr in the 50 to 60 range, suggest these values are lithogeochemically related to basalt. Syn/post Tertiary faulting possibly explains the distribution of oxidation SSE of Peak Hill.

Rock sample 50043 from the vicinity of the iron oxidised zone is described as possible siltstone. Geochemically it bears 14% Ca and 4.6% Mg suggesting it's a dolomitic limey siltstone. This outcrop is in an area previously considered to be Tertiary basalt covered.

Further iron oxide / magnetite fault breccia was located by Edrill in the Puffers Creek bed (at ~411030mE, ~5426505mN). The author's investigation shows this outcrop is 10m+ in true thickness and represents a strike extension of the magnetite breccia's host by the Lavell Fault ~100m north on the Loyetea Road.

Upstream in Puffers Creek, moderately consolidated sub basalt (Tertiary) conglomerate was located in outcrops of up to 4m+ thickness. The conglomerate is heterolithic bearing Owen detritus of mostly <20cm size (up to 50cm), minor siltstone and scattered sub rounded magnetite clasts within a weakly oxidised matrix. A red hematitic breccia / conglomerate base was sampled (50036). Geochemically this sample returned ~5% Fe but no other elements of significance.

A granule sandstone (50039) with common red hematitic chert clasts to 1cm in a dark grey and pervasive hematite altered matrix contained 4% Fe.

Altered outcrop (50038) of shale with minor siltstone and very fine grained sandstone interbeds was located near an oxidised seep. The interbeds were weak to moderately silicified with disseminated pyrrhotite(2-3%, locally 4%), whilst most of the dark grey shale contained ~1% Py and sparse chlorite was also evident. Sample 50038 returned 9.5% Fe and weakly elevated W (39ppm) compared to other samples.

Ground Magnetics

Approximately 15 ground magnetic traverses totalling ~7.5line km extended and infilled the existing ground magnetic coverage of the Redwater Creek and Peak Hill area (Figure 4). This included two infill lines on westerly orientation undertaken north of the Redwater Creek Prospect and RED2 drill hole to better define the distribution of the known ironstone. Further lines extended east and southeast of the later to cover an aeromagnetic high, with additional readings further afield near the Laurel Creek Prospect.

Edrill's Gary Lavell undertook the surveys on an ad hoc basis with a G856, covering readily accessed areas and roads at approximately 5m station spacing. The ground magnetic surveys aim to maintain an ~40m line spacing where possible. Each station was GPS located and later smoothed to eradicate erratic points. No base station was used for diurnal correction. Point data was digitised and roughly edited to create grids for Peak Hill and Laurel Creek (Figures 5 & 6).

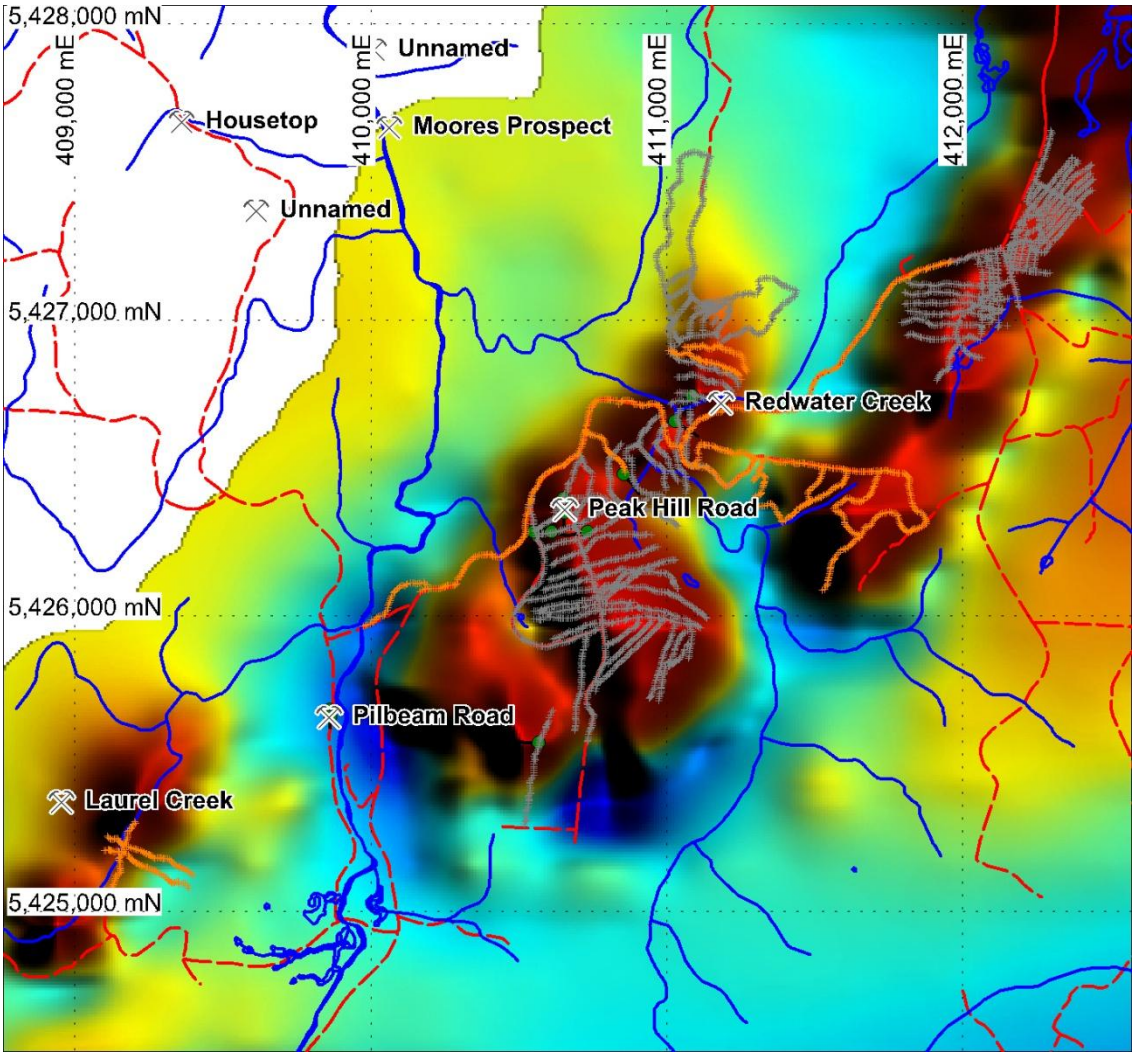

Figure 4: Ground magnetics points (orange = 2017) over VTEM aeromagnetics TMI.

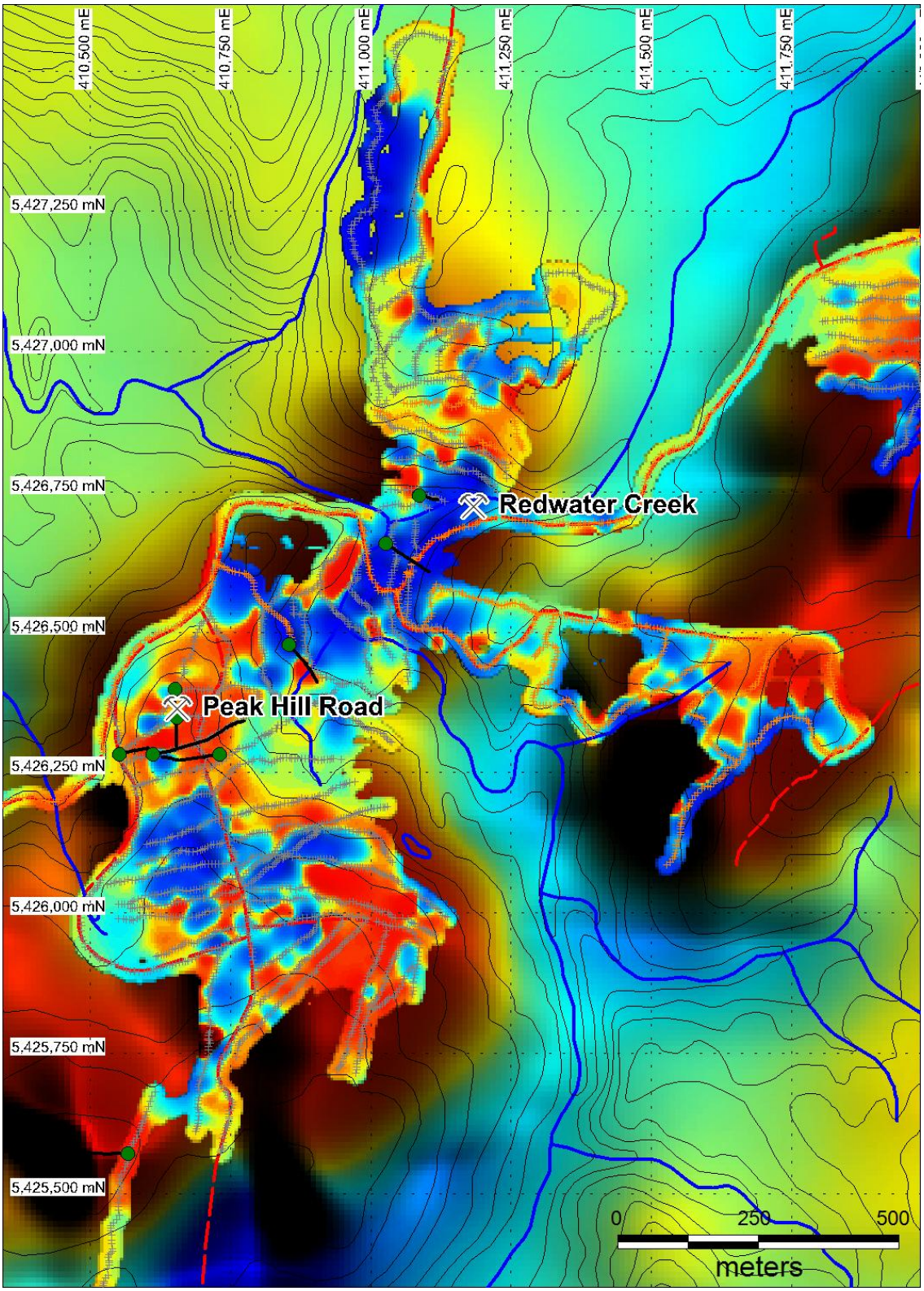

Figure 5: Ground magnetics for the Peak Hill / Redwater Creek area (2017 points in orange) over VTEM TMI.

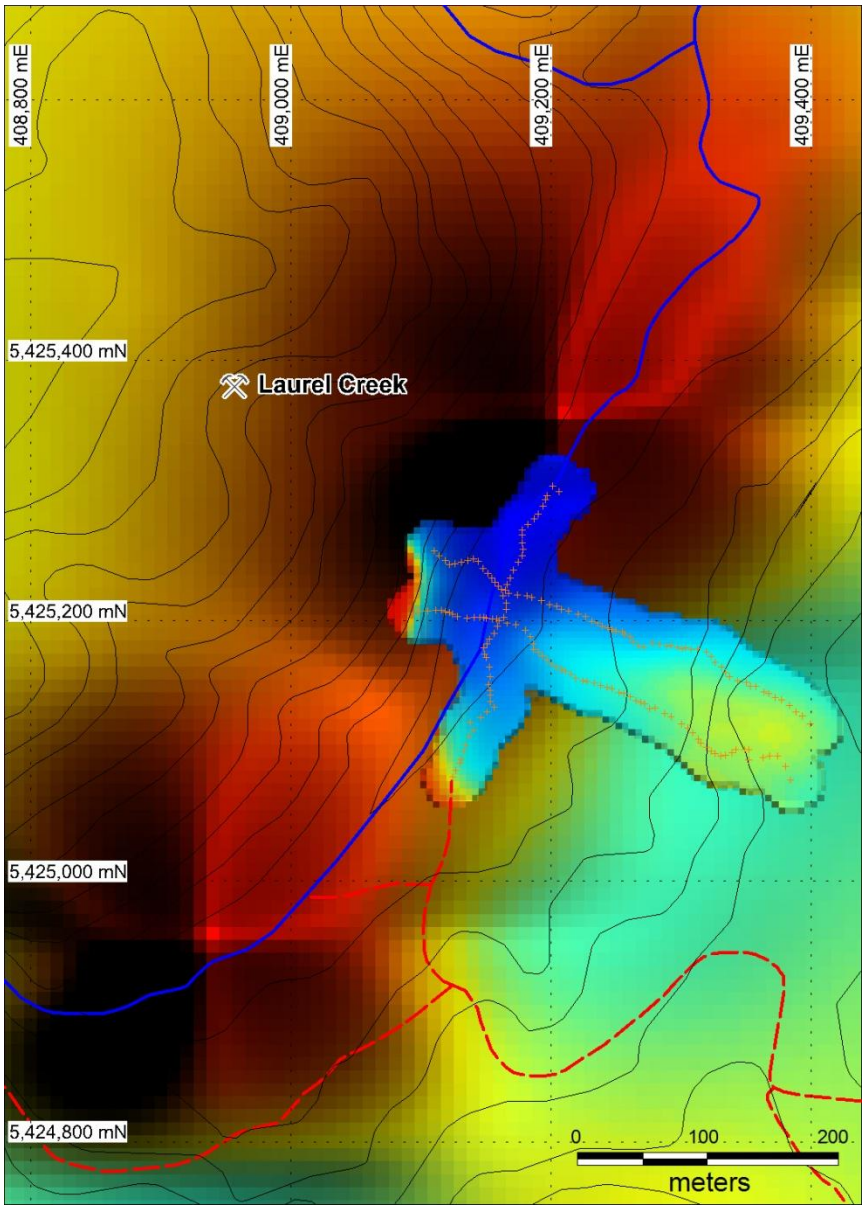

Figure 6: Ground magnetics for the Laurel Creek area over VTEM TMI.

Environment

No activities involving significant earth works were undertaken during the reporting period.

References

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Appendices

Appendix 1:- Appended Digital data

Exploration Work Type	Filename	File format
Report	EL122014_201708_01_Report.pdf	*pdf*
Surface sampling		
	EL122014_201708_02_SG_1.xls	xls
	EL122014_201708_03_Analysis_BU16150968.pdf	*pdf*
	EL122014_201708_04_Analysis_BU16171856.pdf	*pdf*
	EL122014_201708_05_Analysis_BU16192452.pdf	*pdf*
	EL122014_201708_06_Analysis_BU17051203.pdf	*pdf*
	EL122014_201708_07_Lithologycodes.xls	xls
	EL122014_201708_08_SGroundMagnetics.xls	xls
File Verification Listing	EL122014_201708_09_FileListing.xls	xls