

Lottah Mining Pty Ltd
Annual Report on Exploration
EL 53/2007 “Mt Everett”
Dec. 2018 to Dec. 2019

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Abstract

In 2018 (MacDonald, 2018) it was decided to test the Blythe River North anomalies by 4 (or 6) shallow diamond drill holes for 120-150m (200m) and clean out and resample the two historic costeans as part of a larger programme which drilled the Hampshire, L1 and L13 magnetite deposits. Unfortunately funds were depleted before the Blythe River drilling could be done.

That work remains to completed in the 2019/2020 year if an extension is granted.

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1.0 Introduction

1.1 Location and access

EL 53/2007 covers an area of 23 km² in Tasmania's northwest, inland from Burnie.

Access to the tenement is best achieved from the Hampshire Natone road and thence by gravel roads such as Blythe Road. Access within the licence is via limited historic and current logging roads and tracks.

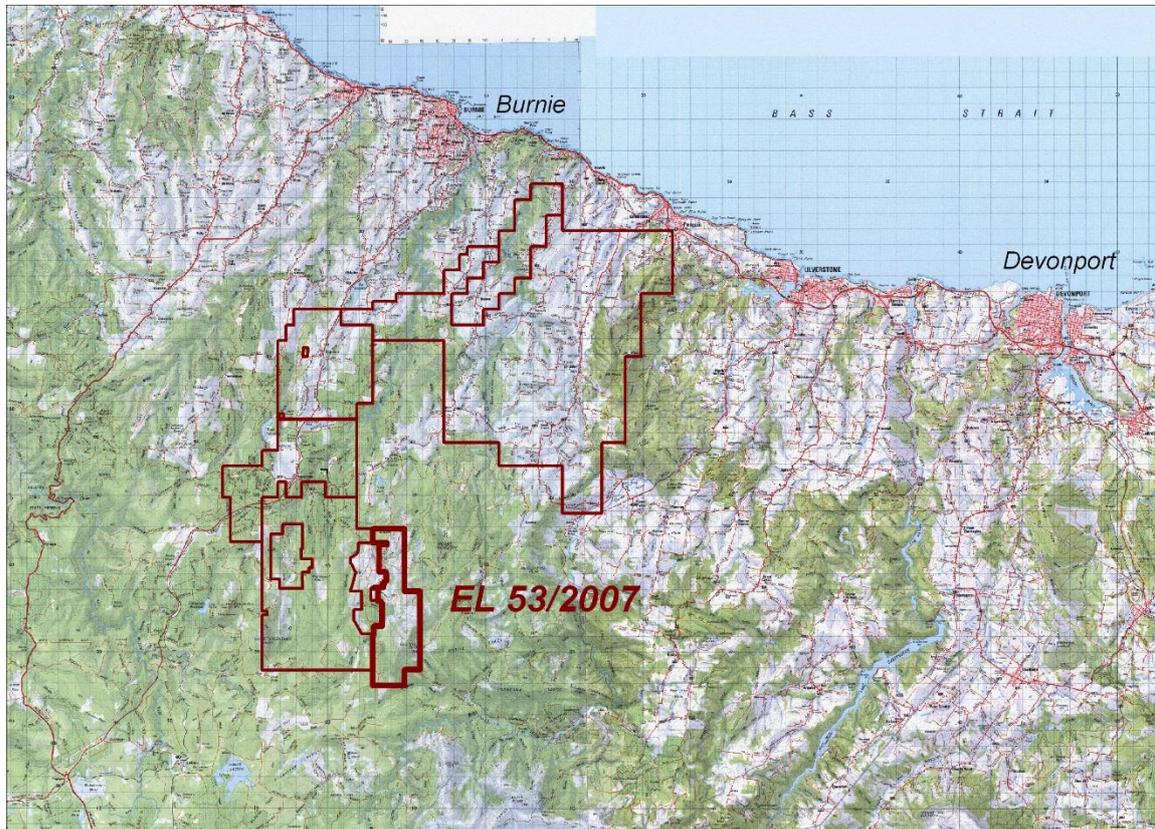


Figure 1.1: EL 53/2007 location.

1.2 Land status and usage

EL 53/2007 consists of primarily State Forest in the northern 2/3 of the tenement with private freehold in the southern 1/3. Almost the sole usage of the land is forestry.

1.3 Tenure

Exploration Licence EL 53/2007 "Mt Everett" was granted to Blythe River Iron Pty Ltd in 2007. Blythe River Iron Pty Ltd was bought out by Forward Mining whose parent company is Lottah Mining Pty Ltd.

ML 1996P/M was excised in part from EL 53/2007 on 4th June 2015.

22 square kilometres were relinquished in December 2017 leaving 23 square kilometres.

EL 53/2007 remains in the name of Blythe River Iron Pty Ltd but is owned and managed by Lottah Mining Pty Ltd.

1.4 Exploration focus

Lottah Mining Pty Ltd has a JORC compliant magnetite iron resource at its Rogetta North project on ML 1996P/M to the immediate west of EL 53/2007. ML 1996P/M was in part excised from EL53/2007

Lottah Mining Pty Ltd also has a JORC compliant hematite iron resource deposit on EL 6/2005 to the northeast of EL 53/2007.

Lottah Mining Pty Ltd is targeting further magnetite and/or hematite iron deposits to add to its resource inventory.

Lottah Mining Pty Ltd is also targeting any commodities of commercial interest including but not limited to W03, Sn, Bi, Mo, Cu, Pb, Zn, Au, Ag, Li, Ni, REE, wollastonite and facing stone.

2.0 Geology

Regionally the geology of the Rogetta Project area is dominated by a basement of Proterozoic metasediments (and minor mafic volcanics) of the Oonah/Burnie Formations unconformably overlain by a sequence of Cambro-Ordovician volcanics and sediments, both intruded by the Devonian Husetop Granite, all obscured by a veneer of Tertiary basalt.

The basal unit of the Cambro-Ordovician sequence consists of Mt Read Volcanics, correlated with Tyndall Group. These are overlain by the Owen Group sediments.

The basal member of the Owen Group is a quartz pebble conglomerate with local additions of volcanoclastic detritus. The conglomerates are overlain by the Moina Sandstone which has a gradational contact with the overlying Gordon Group Limestone, becoming more calcareous towards the contact.

The Gordon Group limestones and dolomites are the host to skarn mineralisation.

These basement rocks were deformed in the Middle Tabberrabberan Orogeny under a largely east-west compressive stress regime. This resulted in the development of north to north-northeast striking F2 folds superimposed on a much broader east-west F2 fold.

Late in the orogeny the I-type Husetop Granite was emplaced passively and underlies most of the Rogetta Project tenements.

Skarn mineralisation was introduced into calcareous rocks by fluids derived from this granite with rarer vein style mineralisation also associated with this intrusive. Whilst previously considered to be a single body more recent work (McKeown, 1994) suggests that the granite consists of a number of phases often intruding as dykes as opposed to a large rounded batholith geometry.

In the Tertiary topographic lows were filled by basal sediments followed by thick Tertiary basalt flows which spilled over onto more undulating topography as a thin veneer.

Within EL 53/2007 granite outcrops over the northern third of the licence with gravity data indicating that the granite body continues beneath the rest of the licence area. Tertiary basalt covers the bulk of the rest of the licence with the Cambro-Ordovician rocks outcropping on the eastern side of the middle third and at the very southern end of the licence.

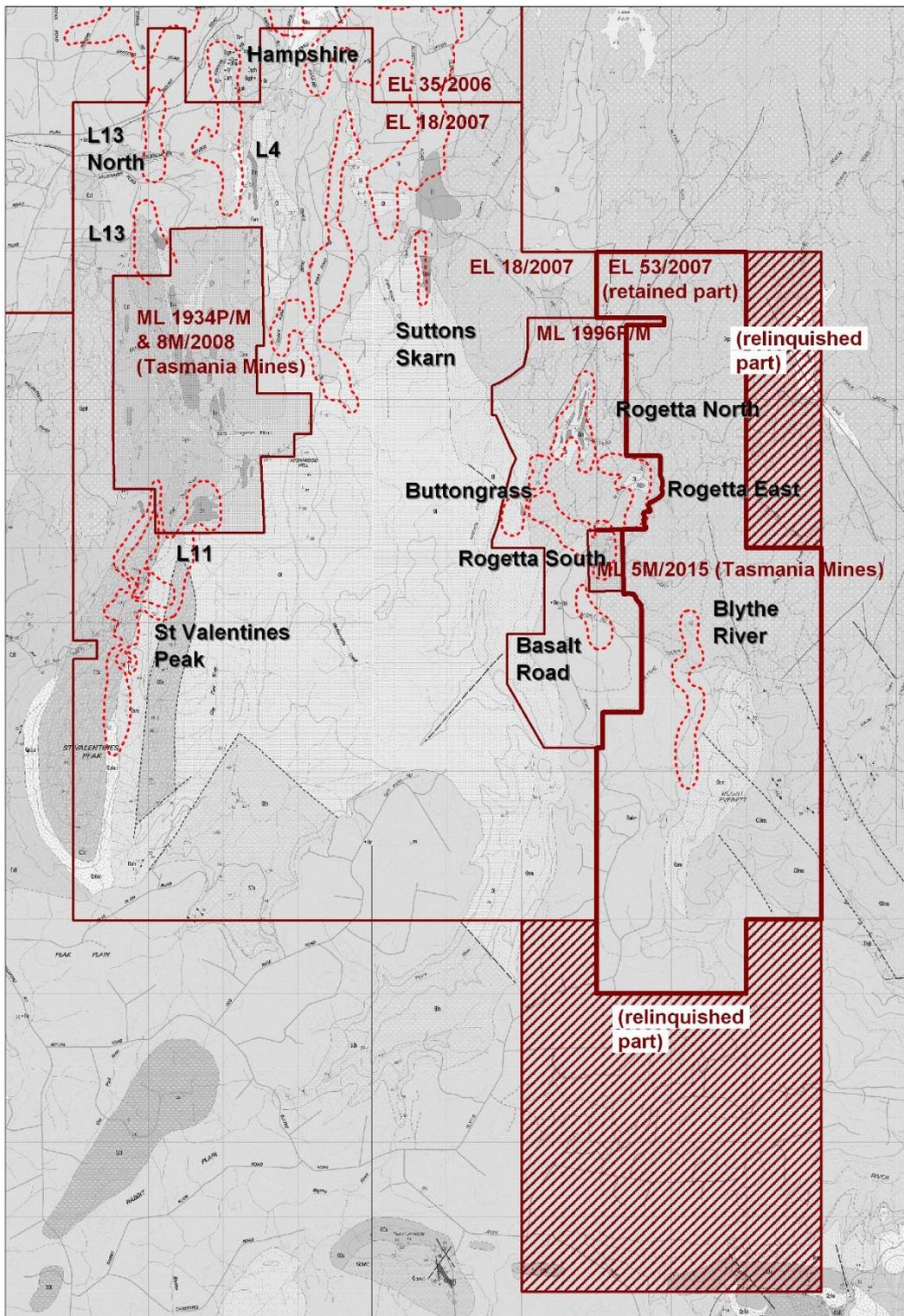


Figure 2.1: Geology, tenements and prospects for Lottah's Rogetta Project. Solid lines along contact between granite and basalt and granite and Cambro-Ordovician rocks is for reference in subsequent geophysical images. Red dashed line is outline of major magnetic anomalies

3.0 Review of Previous Work

3.1 Prior to current tenement

The area of EL 53/2007 has seen relatively limited focussed exploration with that which has occurred largely targeting tin and tungsten in skarn. The two main bodies of work are those carried out by Shell on their EL 36/1979 and Comalco on EL 4/1977 (which included a 1km wide strip within the current EL 53/2007).

Regional aeromagnetics in 1980 and INPUT EM + magnetics in 1983 by Shell on EL 36/1979 recognised the Blythe River prospect as a north-south linear magnetic high (Lawton *et. al.* 1983).

Shell followed this up with gridded soil sampling (Sn, W, Mo, Cu, Zn, Ba) and magnetics on an initially 1.5km long north-south baseline with 100m spaced east-west wing lines to cover the northern end of the trend (Blythe River North) (Lawton *et. al.* 1983). The grid was extended a further 1.2km south to cover the southern magnetic anomalies (Blythe River South).

Two trenches were dug across the northernmost magnetic anomaly's peak. Both intersected magnetite skarn. The southernmost trench on line 2700mN intersected a 15m thick zone of magnetite skarn dipping -25° to the southwest. The northernmost trench intersected a 20m thick zone of skarn but with only 3 thick zones of magnetite skarn, again dipping -25° to the southwest. Shell concluded that based on the ground magnetics the magnetite skarn only extends 15-20m down dip though this is unconfirmed by drilling.

Comalco carried out stream sediment of the magnetic fraction sampling for tin and tungsten defining an area just east of the Blythe River (500m west of the Blythe River South magnetic anomalies) with anomalous drainage for tungsten (blue scheelite). A grid was established and magnetics and gradient IP surveys read. The geology was shown to be Tertiary basalt with one small window of Ordovician sandstone.

A 700m long IP anomaly was defined which was drill tested in a more accessible part of the anomaly by BRD1. The 57m hole did not penetrate the Tertiary cover with water influx corresponding to Tertiary sands and gravels causing the hole to be terminated. A zone of peat intersected between 4m and 7m was considered to be the source of the IP anomaly and no further work was recommended.

Given the position of the anomalous drainage with respect to the Blythe River South magnetic anomaly it is conceivable that the latter was the source of the tungsten.

3.2 During current tenement

EL 53/2007 originally contained the Rogetta East prospect which has been included in ML 1996P/M (which was granted on 4th June, 2015) with a significant body of work conducted on that prospect. That work is detailed in previous reporting.

Work during the current tenement over the current area of EL 53/2007 has been more limited with the focus shifting to the rest of the tenement in late 2015.

During the period of December 2016 to December 2017 a comprehensive compilation of previous exploration work was completed with the downloading of all relevant reports from MRT's website and the construction of a drillhole database. This work also included compilation of existing airborne magnetic data and digitising of the Shell's Blythe River grid ground magnetics surveys.

Ground magnetic data from Shell's survey over the Blythe River grid was digitised (figures 3.1 and 3.2).

Trench mapping was also digitised (figures 3.5 to 3.6).

Reconnaissance field mapping was undertaken at the Blythe River (north) prospect to follow-up the magnetic anomalies defined in the regional aeromagnetic datasets and to attempt to locate the trenches.

Mapping located the 2750mN trench which is now essentially collapsed in. The 2700mN trench is less clearly defined but loose float around 404,230mE 5,422,965mN may represent it.

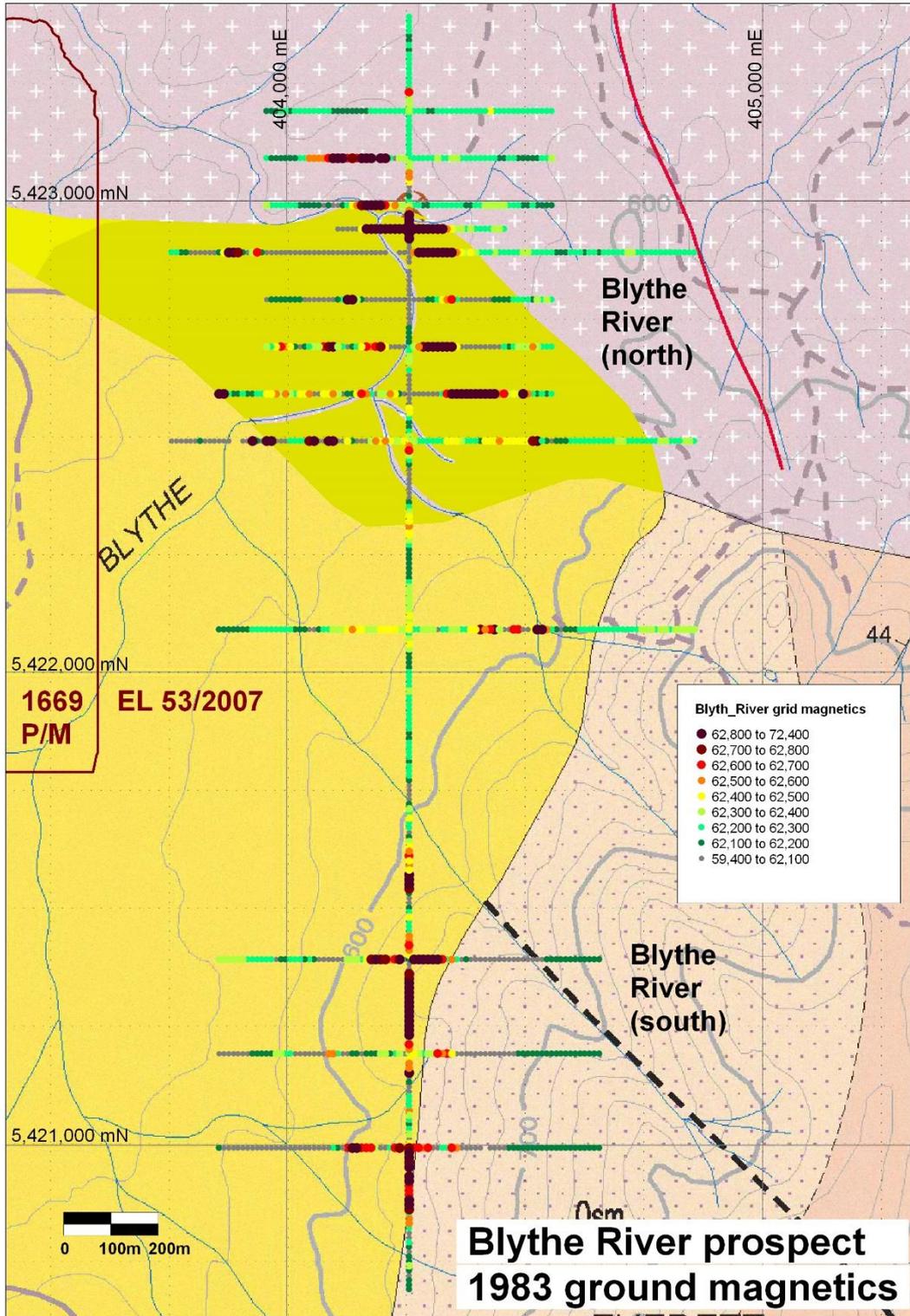


Figure 3.1: Blythe River prospect showing Shell's 1981 ground magnetics survey as colour coded data points superimposed on 1:25,000 MRT geology.

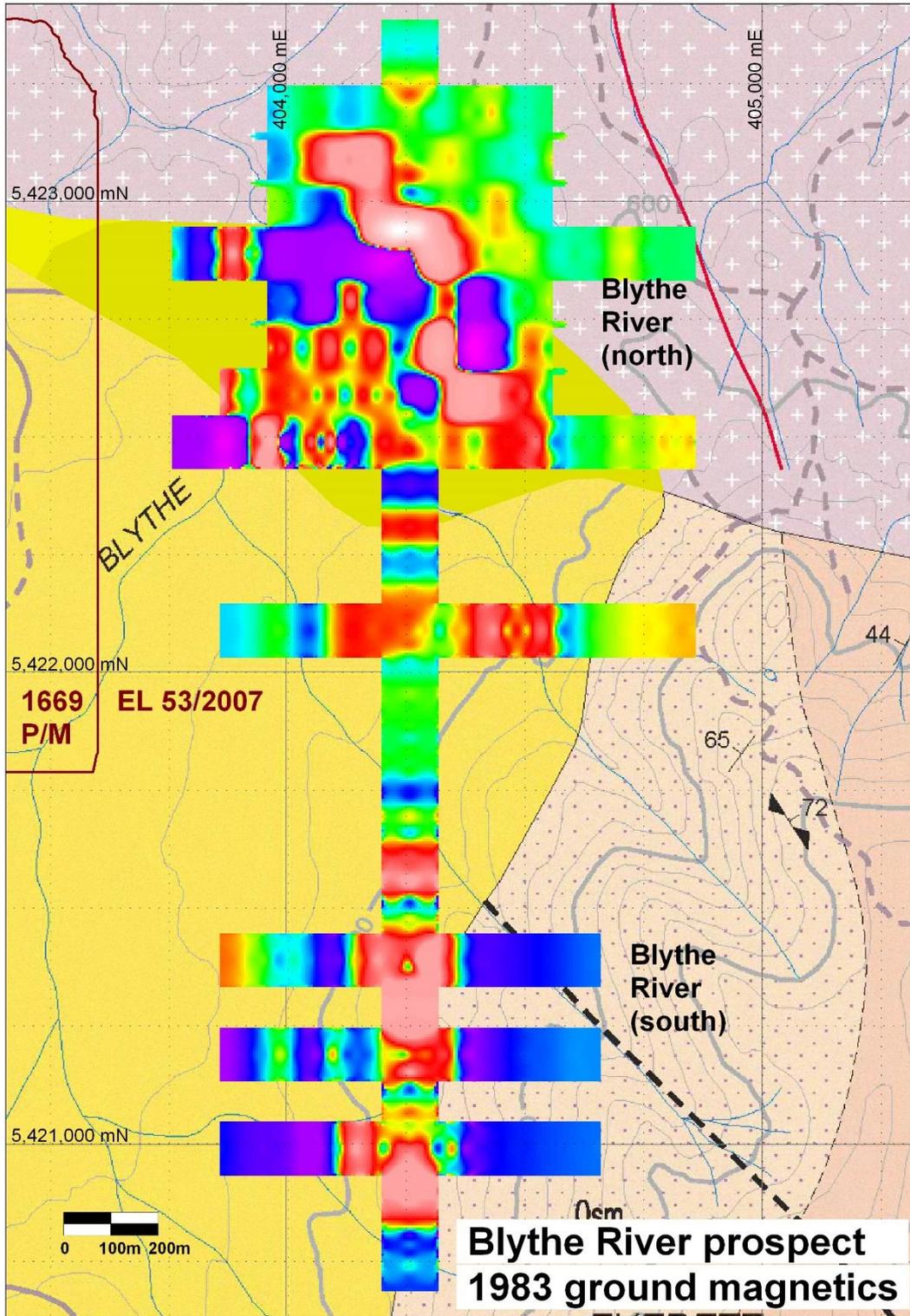


Figure 3.2: Blythe River prospect showing Shell's 1981 ground magnetics survey as an enhanced image (ID2 with 60m range and maximum 4 points per square) superimposed on 1:25,000 MRT geology.

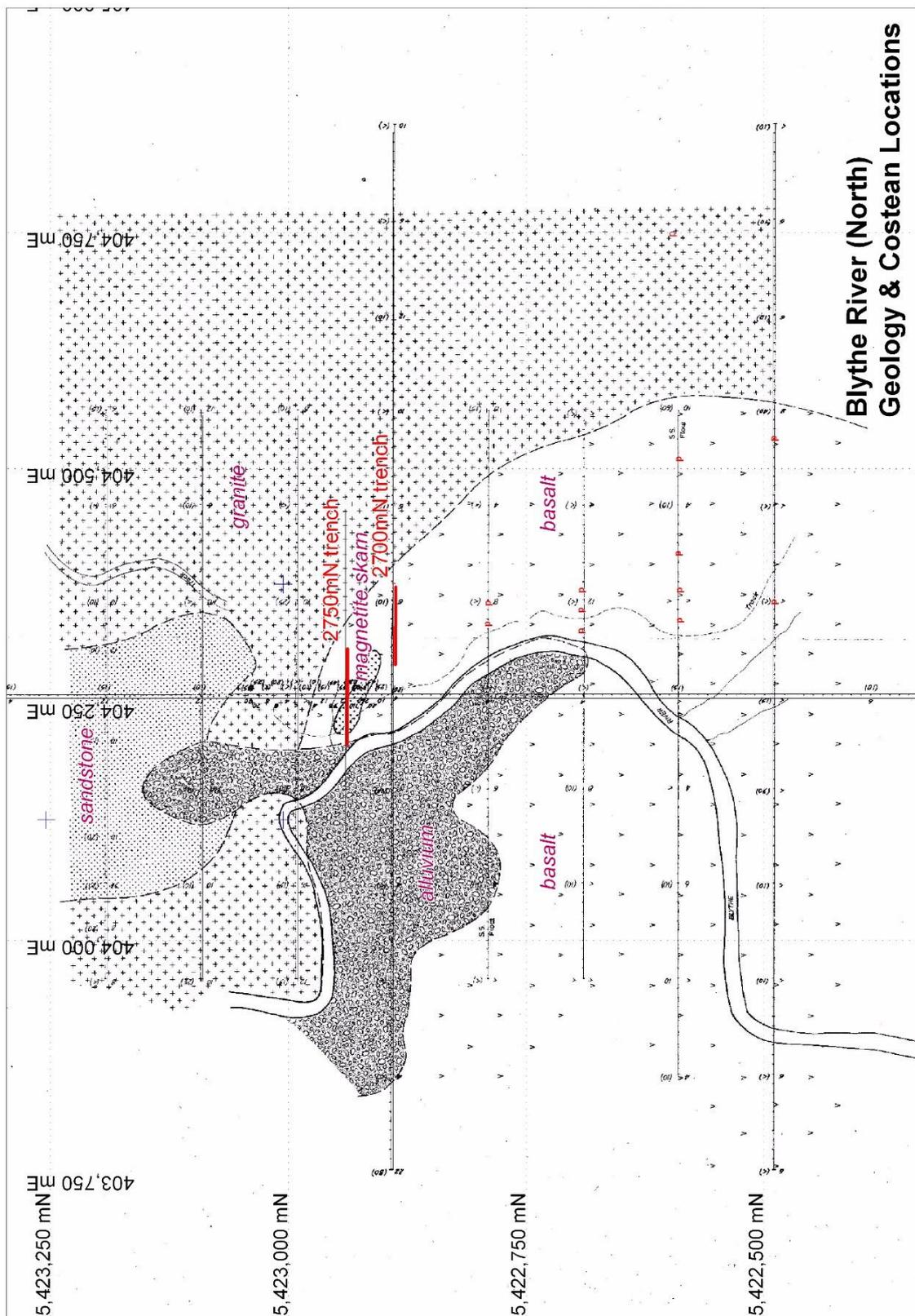


Figure 3.3: Blythe River prospect geology from Shell's 1981 mapping with trench locations as red lines and pit locations as red P's.

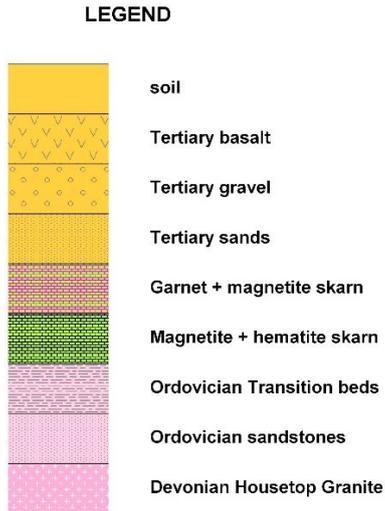


Figure 3.4: Legend for figures 3.5 and 3.6.

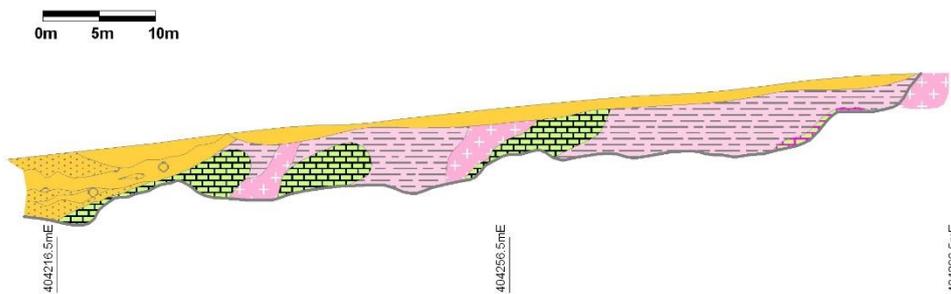


Figure 3.5: Northern trench (2750mN) showing geology. Grid eastings are at 40m separation for scale. Granite dykes shown are pegmatitic with some potential for Li and other category 5 minerals.

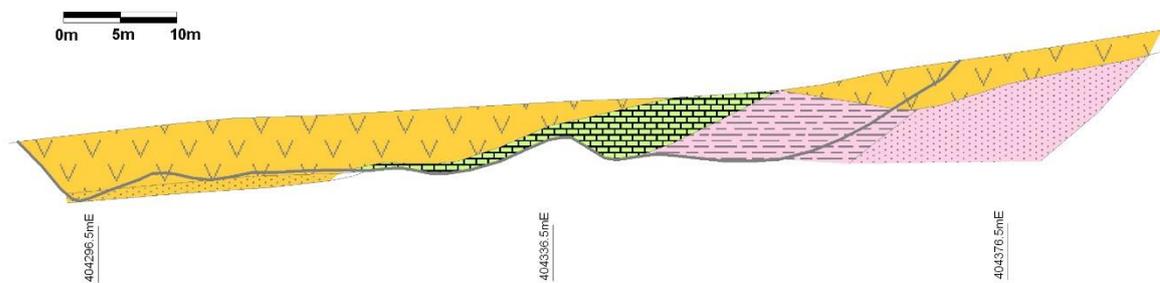


Figure 3.6: Southern trench (2700mN) showing geology. Grid eastings are at 40m separation for scale.

4.0 Exploration completed during the reporting period December 2018to December 2019

There has been no work completed on the tenement during the reporting year.

In 2018 (MacDonald, 2018) it was decided to test the Blythe River North anomalies by 4 (or 6) shallow diamond drill holes for 120-150m (200m) and clean out and resample the two historic costeans as part of a larger programme which drilled the Hampshire, L1 and L13 magnetite deposits.

Unfortunately funds were depleted before the Blythe River drilling could be done and the work remains to be carried out.

5.0 Discussion

The following discussion repeats MacDonald (2018).

“The drill sites and costean locations are on the east side of the Blythe River. The only vehicular access route historically has been Jaffray’s Track, however, Jaffray’s Track is now inaccessible due to the bridges condition and is overgrown for much of its distance.

Foot access is best by walking the 125m from the end of Basalt Road eastwards to the Blythe and crossing on a shingle bank. The formwork for that part of Jaffray’s Track which runs along the Blythe River is ~25m upslope and runs across the southern peak and past the eastern edge of the northern peak.

It is proposed to take an excavator, track mounted drill rig and crawler support vehicle across the Blythe River by fording at this point.

The two existing trenches will be cleaned out and resampled over the northern peak. Over the southern peak a new trench will also be dug along the edge of the existing track.

Two (or perhaps three) shallow diamond drill holes will be drilled into each of the two peaks with depths of 30m – 50m expected.”

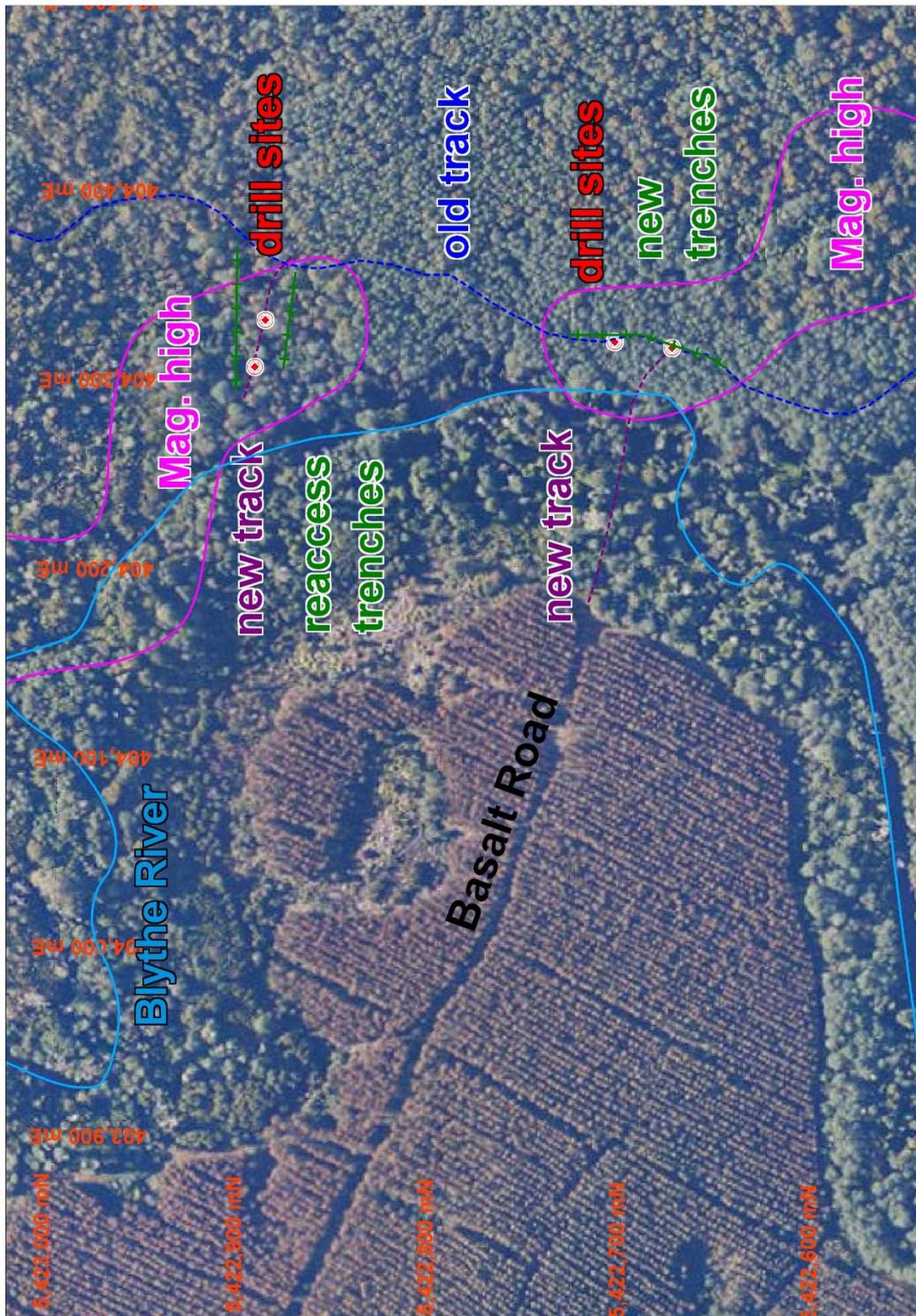


Figure 5.1: Blythe River North prospect showing Magnetic High peaks (pink outline), Blythe River (medium blue solid line), Jaffray's Track (dark blue dashed line), proposed drill holes (red spots), proposed new track (purple dashed line), proposed cleaning out and/or new trenches (green tracked line) on the state orthophoto.

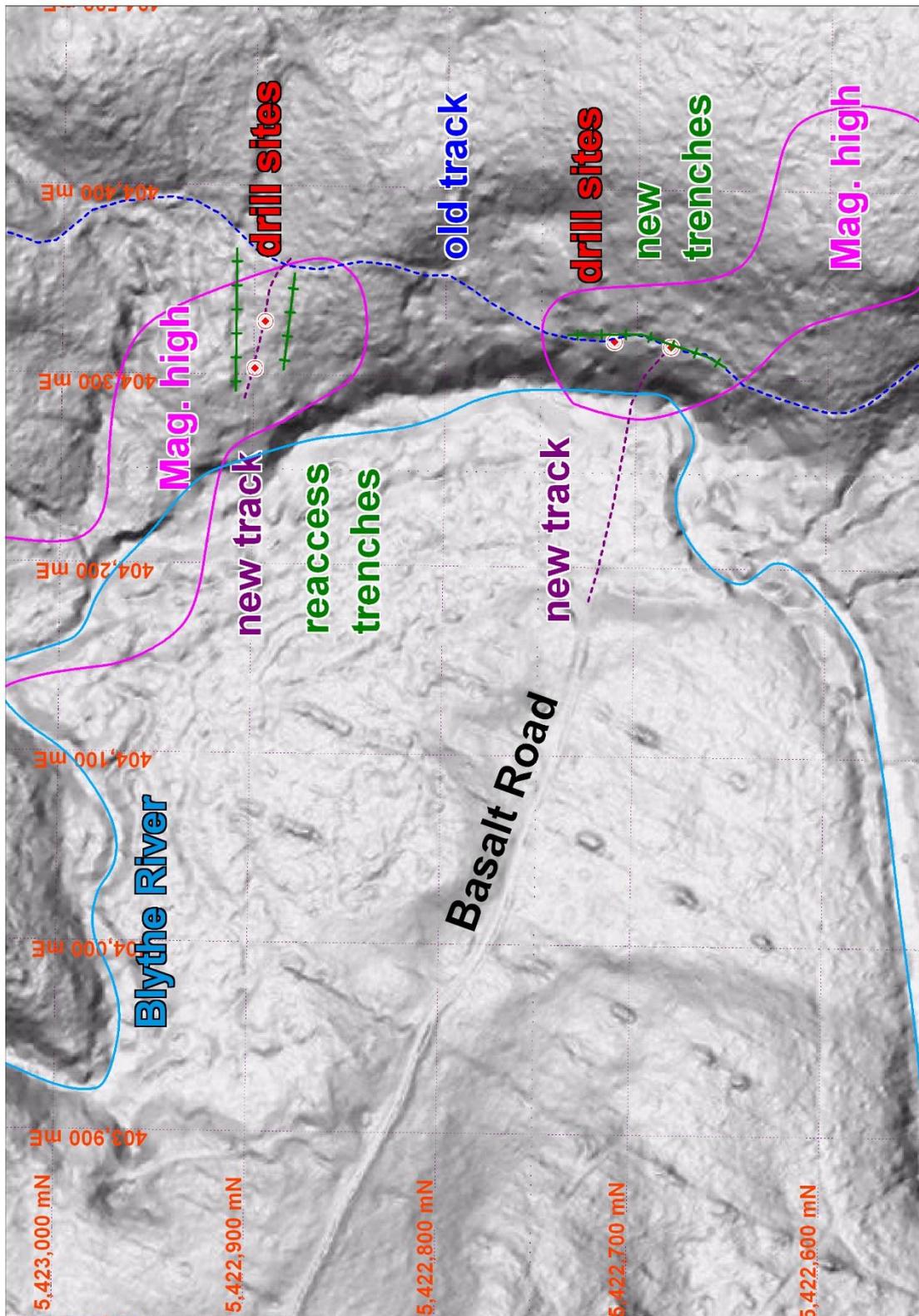


Figure 5.2: Blythe River North prospect showing Magnetic High peaks (pink outline), Blythe River (medium blue solid line), Jaffray's Track (dark blue dashed line), proposed drill holes (red spots), proposed new track (purple dashed line), proposed cleaning out and/or new trenches (green tracked line) on the LIDAR generated hillshade map.

6.0 Proposed Works Programme 2019/20 year

Work proposed 2019/20 year will consist of drilling 4 holes for 120-150m at the Blythe River North prospect and cleaning out and resampling two old trenches with an excavator.

7.0 Expenditure

Exploration expenditure for EL 53/2007 for the period December 2018 to December 2019 was \$2,800 bringing the total to date to \$764,960.

	\$
Geology	500
Geochemistry	0
Geophysics	0
Remote Sensing	0
Drilling	0
Gridding	0
Land Access	0
Rehabilitation	0
Feasibility Studies	0
Other	2,200
Administration	<u>100</u>
Total	2,800

8.0 Environmental

Environmental disturbance on EL 53/2007 during the reporting period was zero.

9.0 References

Askins, P.W. (1980). Completion Report, Blythe Road area, EL 4/77. unpub. rept. for COMALCO. [TCR 80_1433]

Lawton, J.J., Wright, R.G., Buchhorn, I.J. & Oakes, G.D. (1983). EL 36/79 Loongana – Progress Report on Exploration for the Period 1st May, 1980 to 30th June, 1983. unpub. rept. for The Shell Company of Australia, Metals Division. [TCR 83_2045]

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