Lottah Mining Pty Ltd
Annual Report on exploration on
EL 18/2007 “Hampshire 2”
July 2017 to July 2018

Grant MacDonald

Abstract

Work Completed on EL18/2007 during the period of July 2017 – July 2018 consisted of

- the completion of a comprehensive compilation of previous exploration including existing airborne and ground magnetics surveys.
- generation of work proposals including drone magnetics and/or drilling at each of
    - L13
    - L13 north
    - L4
    - St Valentines Peak/L11
    - Suttons Skarn

Table of Contents

Figures

1.0 Introduction

1.1 Location and access

EL 18/2007 covers an area of 62 km2 in Tasmania's northwest, inland from Burnie.

The tenement is best accessed by from the Murchison Highway which passes within 2km to the north of the licence. Access within the licence is via a network of historic and current logging roads and tracks.

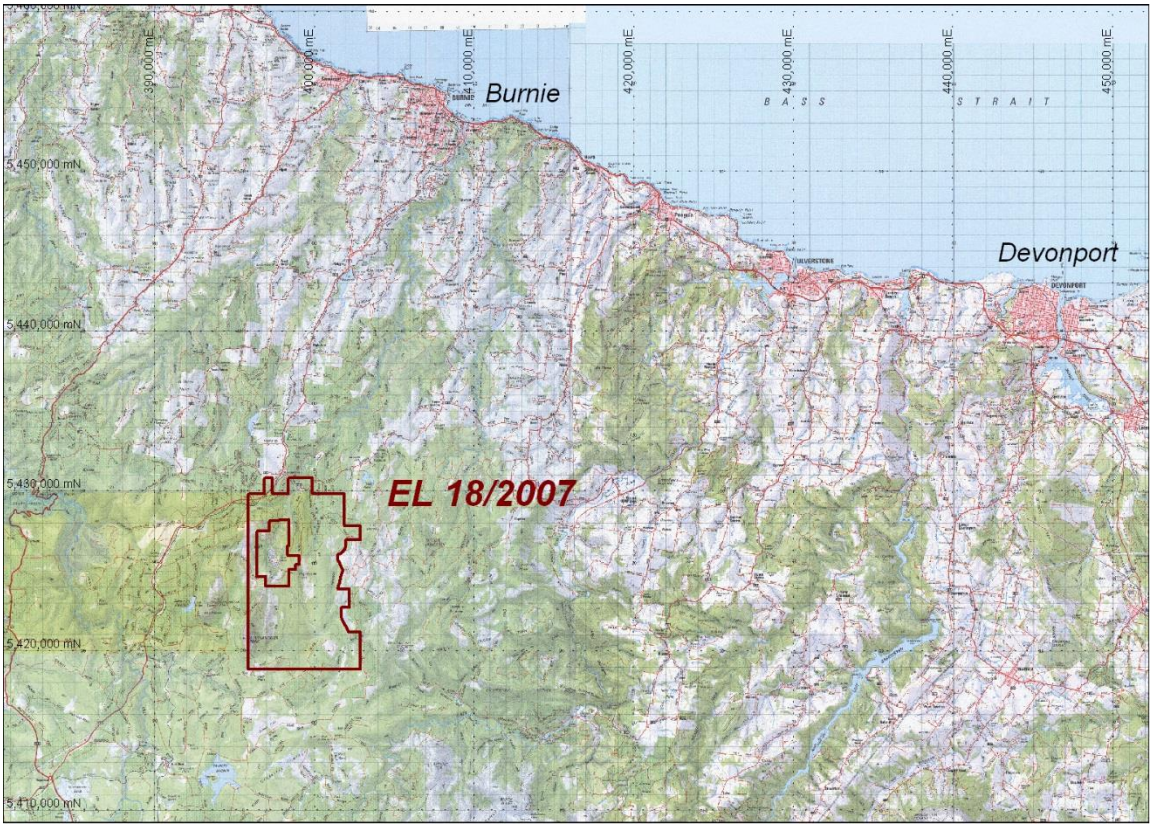

Figure 1.1: EL 18/2007 location.

1.2 Land status and usage

EL 18/2007 consists of primarily private land, Crown Land and Regional Reserve. Almost the sole usage of the land is forestry.

1.3 Tenure

Exploration Licence EL 18/2007 "Hampshire 2" 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 18/2007 on 14th June 2015.

EL 18/2007 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 east of EL 18/2007. ML 1996P/M was in part excised from EL18/2007.

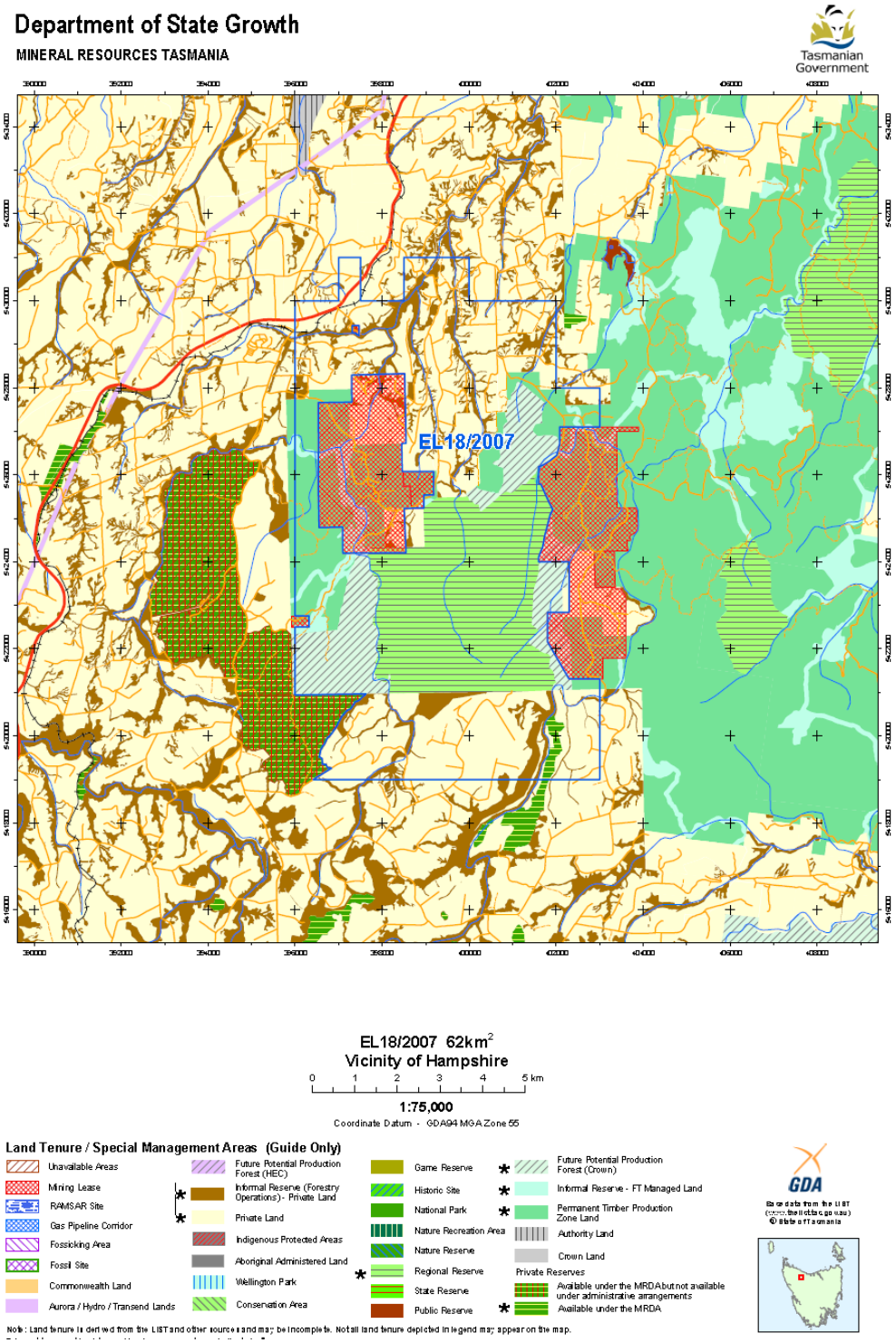

Figure 1.2: Land tenure of EL 18/2007

Lottah Mining Pty Ltd also has a JORC compliant hematite iron resource deposit on EL6/2005 to the northeast of EL 18/2007.

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 Housetop 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 volcaniclastic 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 mineralsation.

These basement rocks were deformed in the Middle Tabberrabberran 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 Housetop 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 18/2007 the Proterozoic rocks remain obscured with the oldest rocks exposed being the Cambrian volcanics in the western part of the licence. Granite outcrops on the eastern and western margins of the tenement and underlies the folded Cambro-Ordovician sequence. Much of the tenement contains outcropping Owen Group sediments and Gordon Group Limestone. Tertiary basalt obscures the basement geology in the north and south of the tenement.

3.0 Review of Previous Work

3.1 Prior to current tenement

The existence of deposits of magnetite and hematite iron in the northern part of Tasmania has been known since the late 19th century.

Modern exploration commenced in the late 1950's with regional geophysical surveys.

From 1969 the area was explored by a number of permutations of Tasminex/Tasmania Mines NL/Tasmania Mines Ltd in joint venture with ANZECO (1971-1974) initially then McIntyre Mines (1977 – 1985). These companies targeted the magnetite skarn for its tungsten and tin potential in particular eventually excising the Kara tungsten+magnetite resource and developing a mining operation.

The focus later shifted to magnetite. In 2005 Red River Resources took up the majority of the current project area forming a joint venture with Iron Mountain Mining Ltd in 2007.

Limited exploration for magnetite has been undertaken on the prospects now within EL 18/2007 with ground magnetics and shallow auger hole drilling at Suttons Skarn (L2) and L13 and ground magnetics at L4 and St Valentines Peak.

Soil sampling for tungsten and tin has also been carried out on a number of prospects.

3.2 During current tenement

In the 2008/09 reporting period work focussed on the Rogetta cluster of deposits (now in ML 1996P/M) with evaluation of historic work, ground magnetics and RC and diamond drilling.

In the 2009/10 period work was carried out at;

- St Valentines Peak - RC drilling (4 holes for 565m) and limited rock sampling
- Suttons Skarn – 120 augered soil/weathered rock samples

From 2010 to 2015 work focussed on the Rogetta North resource with a range of activities including further drilling for both resource and geotechnical purposes, resource estimation, pre-feasibility and feasibility studies, metallurgical testwork, geophysical surveys, and baseline environmental studies culminating in an application for a mining lease over the Rogetta cluster of deposits.

In the 2015/16 period work refocussed on the other prospects remaining in EL 18/2007. In particular work consisted of the commencement of data compilation as well as (incomplete) gravity surveys and basic field reconnaissance. A UAV magnetic survey was also completed over the L13 deposit (see figure 5.5).

In the 2016/17 period work consisted of the commencement of a comprehensive compilation of historical exploration work carried out on the tenement. Reconnaissance field mapping was also carried out on the L13, Suttons Skarn and Wollastonite Creek prospects.

4.0 Exploration completed during the reporting period July 2017 to July 2018

4.1 Introduction

Work on EL18/2007 during the period of July 2017 – July 2018 has consisted of the following;

- Completion of a comprehensive compilation of previous exploration work commenced in 2016/17.
- Generation of work programmes for each of the following prospects within EL 18/2007.
    - L13
    - L13 north
    - Suttons Skarn
    - L4
    - St Valentines Peak/L11

4.2 Data compilation

A thorough approach to compiling historic exploration data and in particular drillhole data, has been implemented with drillhole collars accurately georeferenced and assay and lithological data also input in order to create a comprehensive drillhole database. That work is essentially complete for EL 18/2007.

4.3 Generation of Work Programmes for Prospects in EL 18/2007

From the compilation work discrete work programmes were developed for each of the following prospects

- L13
- L13 north
- L4
- St Valentines/L11
- Suttons Skarn

5.0 Discussion

5.1 Introduction

The following discussion of results is a summary of where work is at this present.

5.2 Data compilation

The data compilation allowed definition of the potential for each of the 5 magnetite prospects within EL 18/2007.

5.3 Generation of Work Programmes for Prospects in EL 18/2007

5.3.1 Introduction

Discrete work programmes developed for each prospect with summaries of potential and the work required to both discover and define these resources made and illustrated with a series of figures which are replicated herein. In a number of instances the proposed holes are idealised and dependant on the results of the drone magnetics. Resource definition drillholes will depend on the results of the first phase discovery holes.

5.3.2 L13/L13 North

L13 prospect is the 2nd largest magnetic anomaly (second to Rogetta North) and is a continuation of the zone extending northwards from the western part of the Kara (Tasmania Mines) deposit.

It is potentially the largest deposit outside of ML 1669P/M.

The northern half of the anomaly is covered by a thin (?) basalt cover. The southern part has been tested in four locations by shallow auger holes (no Fe assays) with unassigned skarn intersected in all four locations and specifically magnetite skarn intersected at three locations with thicknesses ranging up to 10m (and open at depth).

If the drone magnetics anomaly is due to 5m thick magnetite skarn then there is 3.0 Mt of ore. If the magnetite skarn averages 20m thick as per Rogetta North there is 12.0 Mt.

L13 North is a ~1km long continuation of the L13 magnetics anomaly to the north. It has seen no drilling. At this point no resource can be estimated.

Recommendations:

L13

(1) To “discover” a new resource would require 12 holes for 1220m’s.

(2) To model the new resource to JORC Indicated status in preparation for mining (i.e. equivalent to Rogetta North) will require up to further additional 60 holes for 5360m’s making a total of 72 holes for 6780m’s.

L13 North

(1) Planning for drilling will benefit from ground or drone magnetics surveys over the whole area with a total area of 0.6km2 to be surveyed

(2) To “discover” a new resource would require 3 holes for 350m’s.

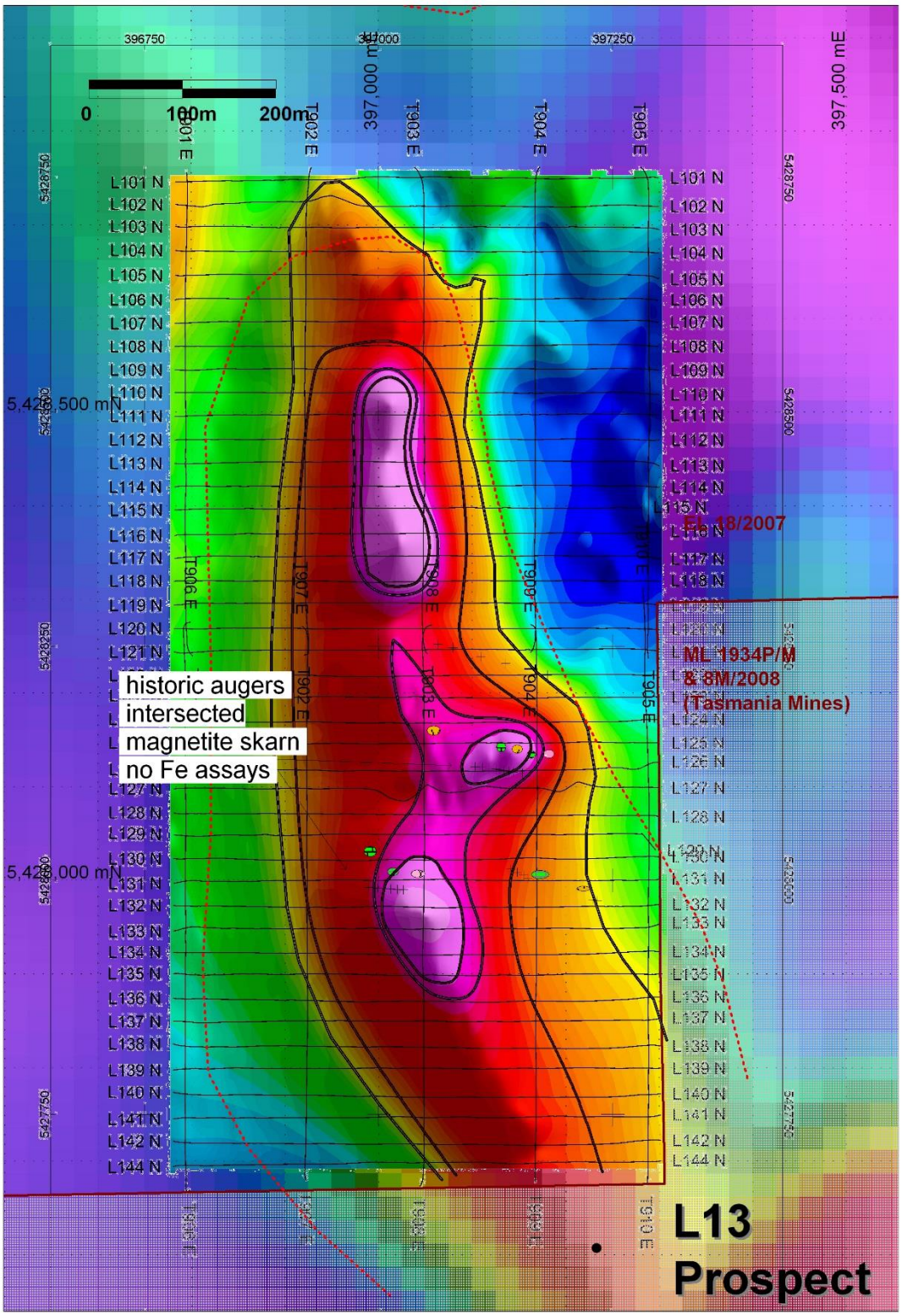

Figure 5.1: L13 prospect showing existing shallow augers (+) and proposed holes superimposed on drone magnetics survey (flight lines from the survey are the east west lines) TMI image. Red dashed line is 25m RTP TMI anomalies outline used as reference line. Dark solid magnetic image contour lines are for reference in the following figure. Small coloured shapes are outcrop – green is skarn, pink is granite and tan is basalt.

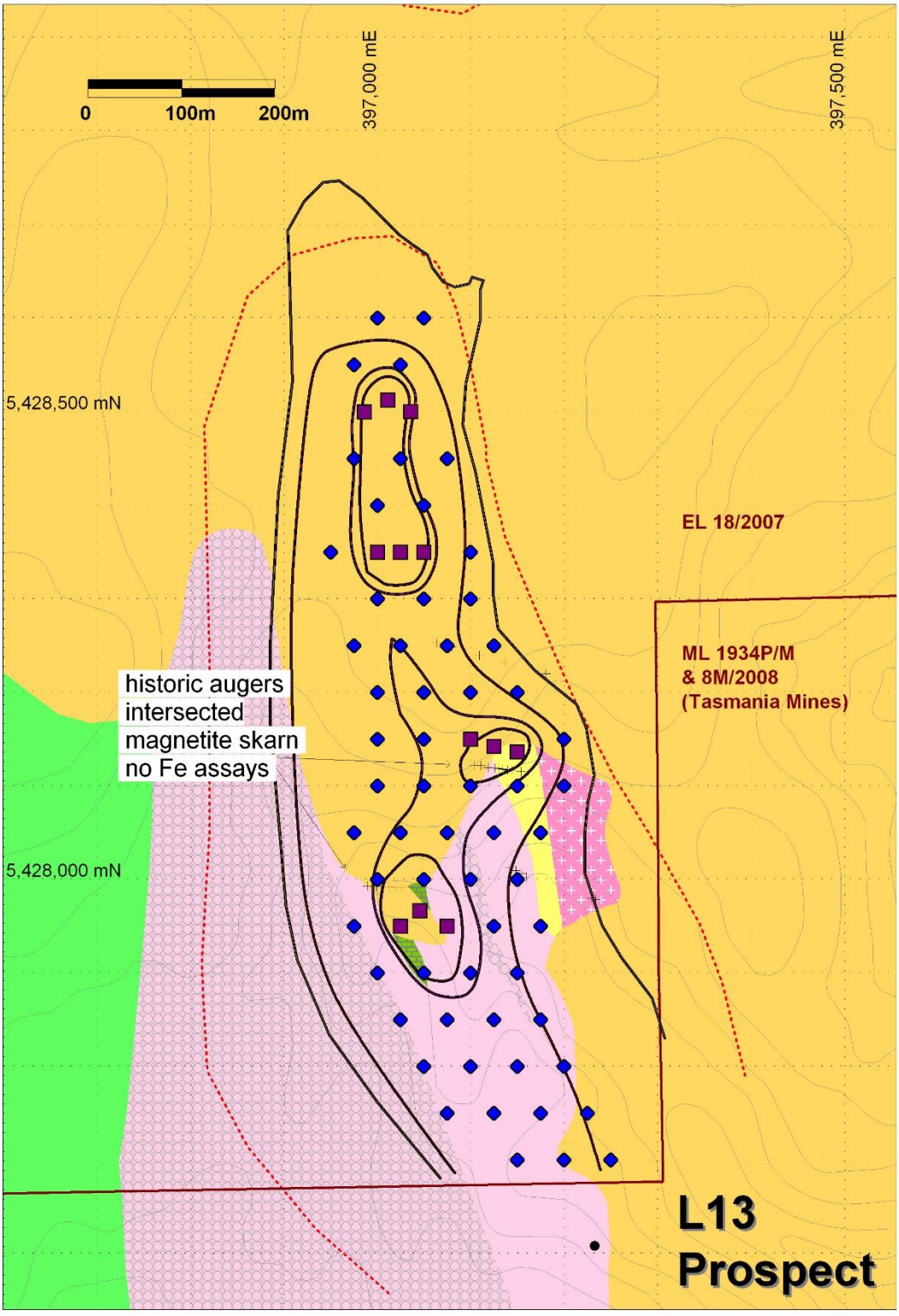

Figure 5.2: L13 prospect showing existing shallow augers (+), proposed drill holes as purple squares (discovery holes) and blue diamonds (resource definition holes),superimposed on geology which is from Tasmania Mines mapping in 1974. Red dashed line is 25m RTP TMI anomalies outline used as reference line. Dark solid lines are reference lines from previous figure.

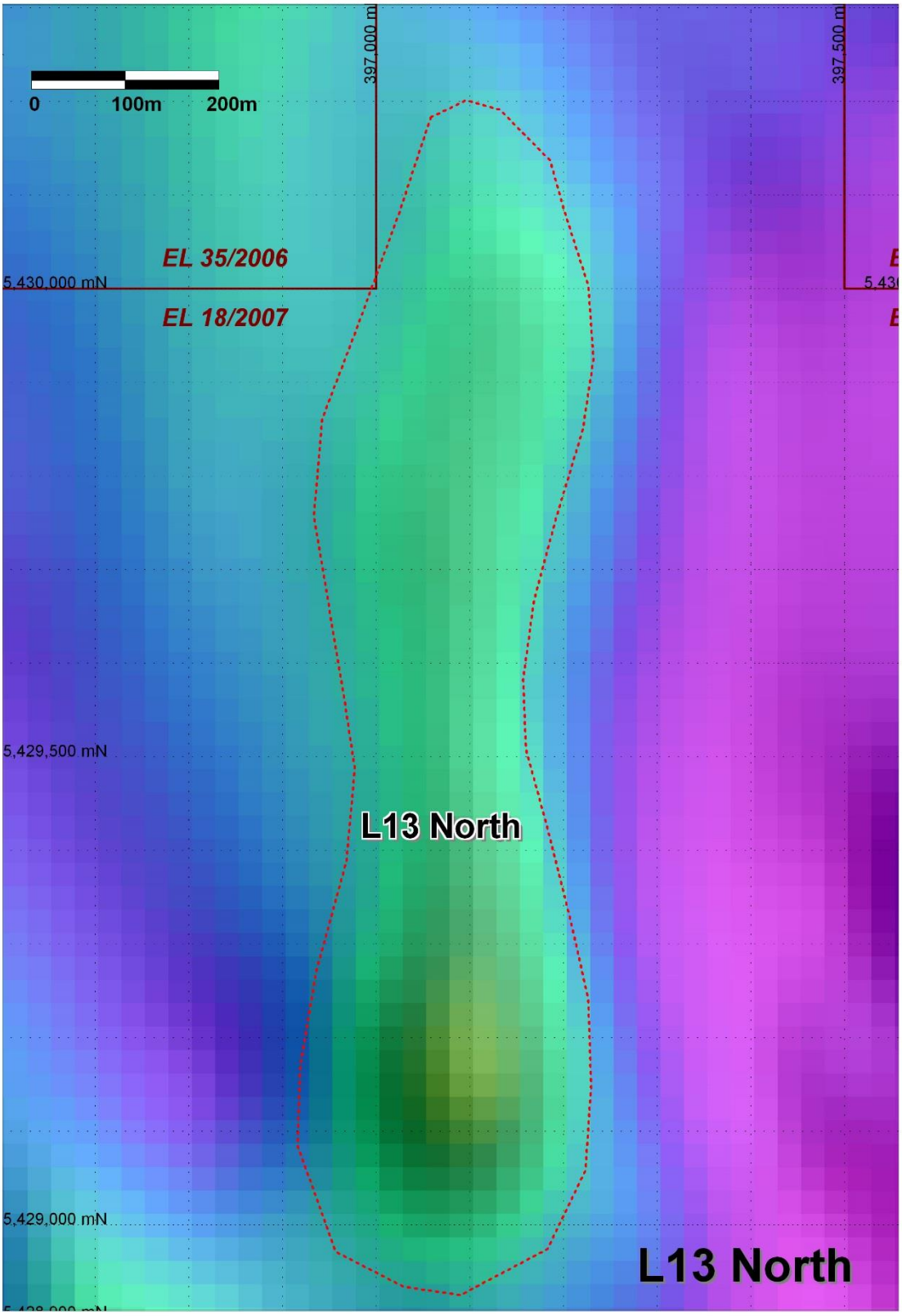

Figure 5.3: L13 North prospect 25m RTP TMI image. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

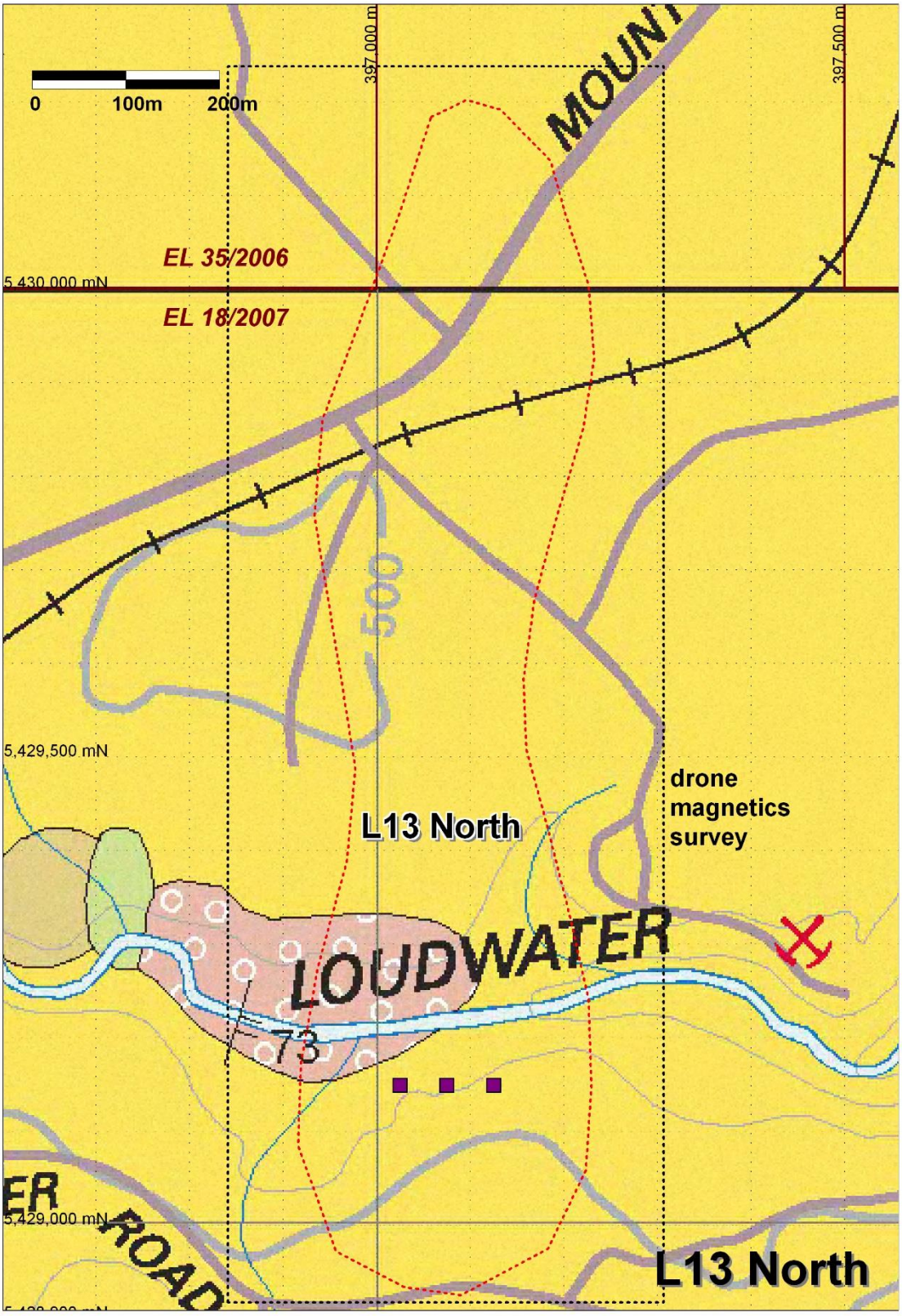

Figure 5.4: L13 North prospect showing proposed drill holes as purple squares (discovery holes) and proposed drone magnetics survey, on 1:25000 geology. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

5.3.3 L4

This prospect is a 1.5km long air magnetics anomaly joining the Hampshire resource to Tasmania Mine's L5 prospect. There has been no drilling but old maps show outcropping magnetite skarn. Mineralisation is likely to be a continuation of that at Hampshire i.e. potentially a 5 – 7m thick band of massive magnetite skarn.

The resource potential is unknown but potentially **+2.5-5.0**Mt.

This area of largely inaccessible thick bush (gorse) will require a drone magnetics survey to define the areas for drilling.

Recommendations:

(1) Drone magnetics survey over whole of prospect 0.6skm.

(2) To "discover" a new resource and (possibly) model a JORC Inferred resource would require 23 holes for 2000m's. Drill hole positions will depend heavily on the results of the ground magnetics survey also.

(2) To model the new resource to JORC Indicated status in preparation for mining (i.e. equivalent to Rogetta North) will require up to further additional 30 holes for 3000m's making a total of 53 holes for 5000m's.

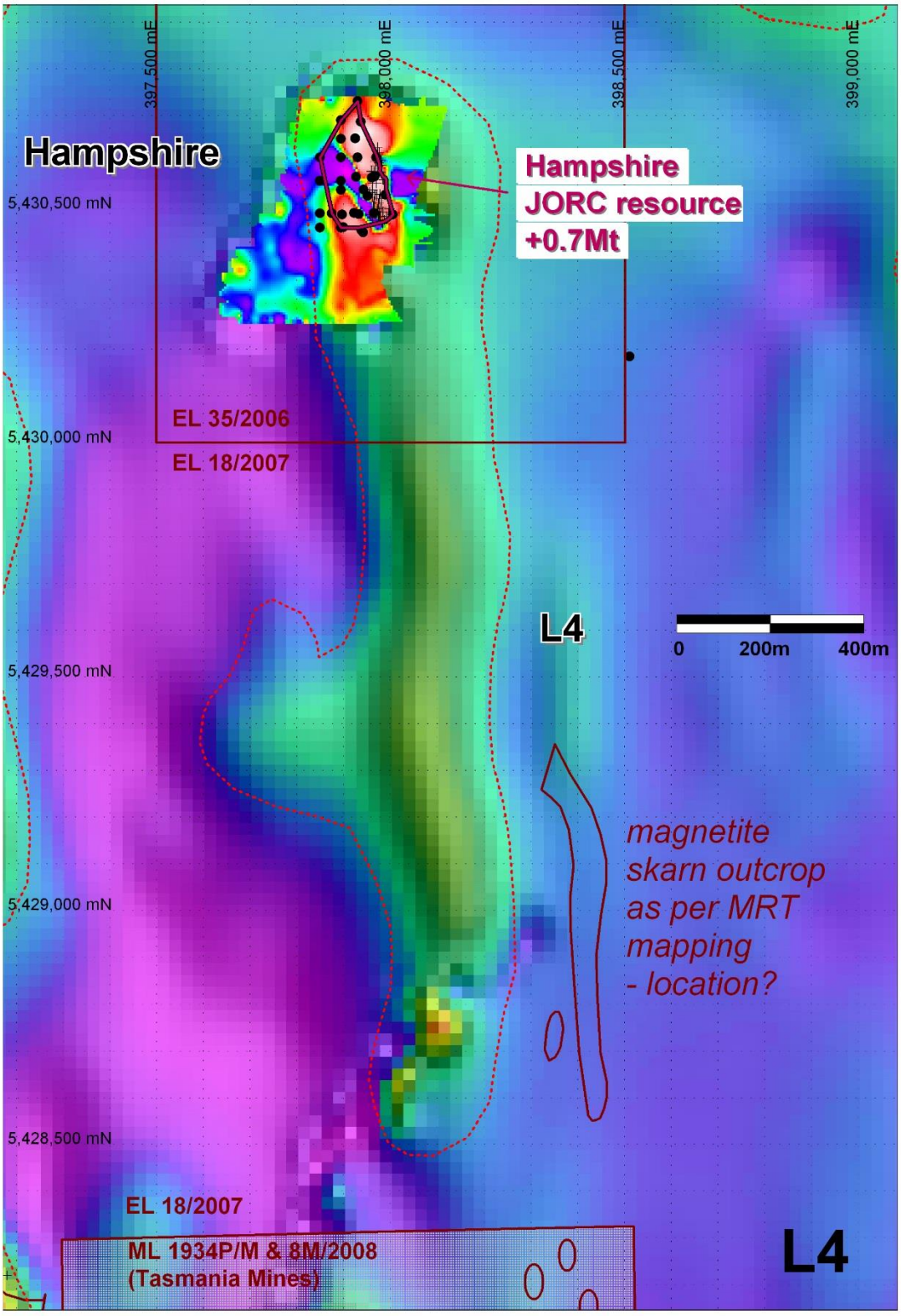

Figure 5.5: L4 prospect showing areas of mapped outcropping magnetite skarn, existing drill holes (at Hampshire), ground magnetics survey (at Hampshire) superimposed on 25m RTP TMI image. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

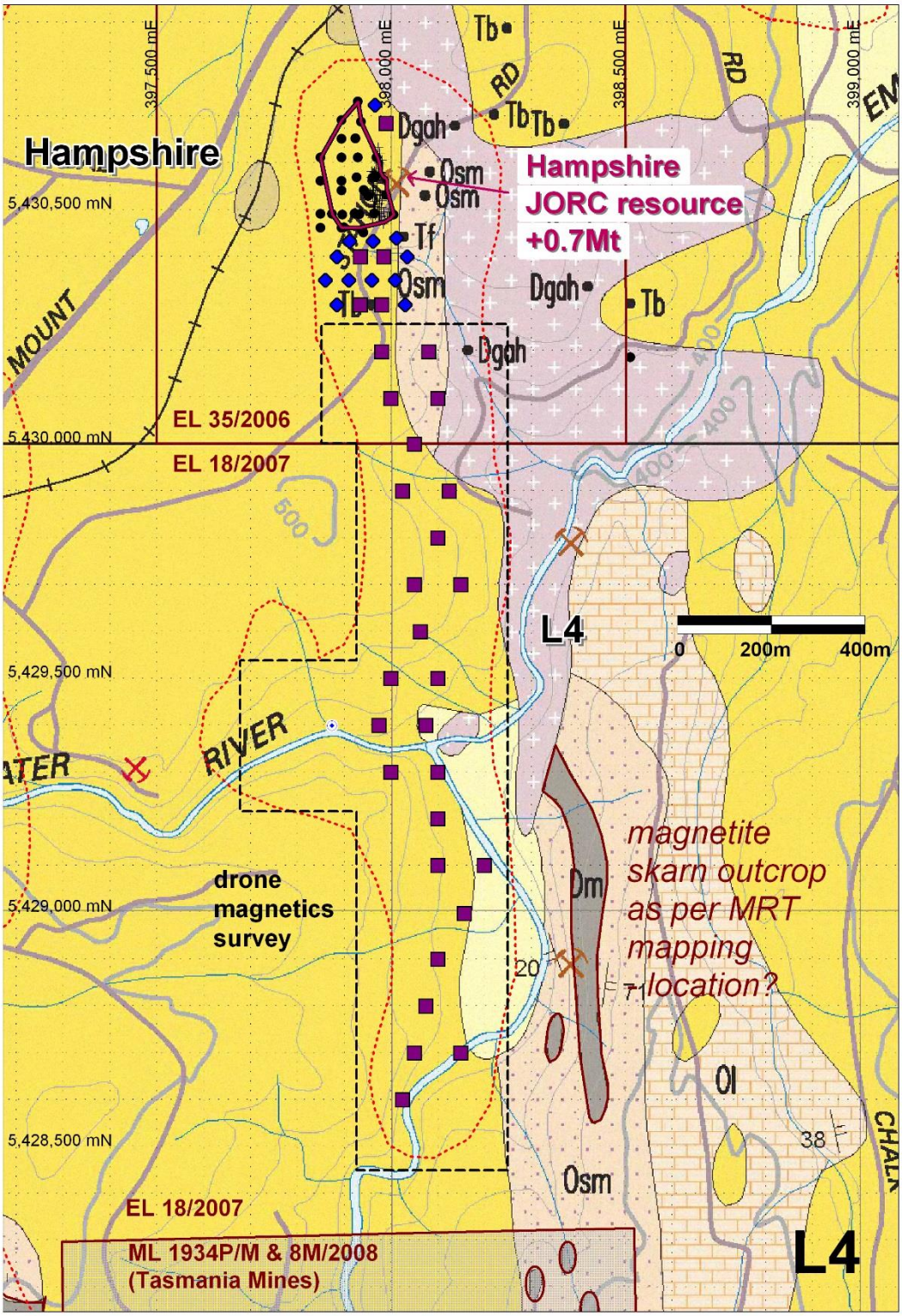

Figure 5.6: L4 prospect showing existing drill holes (at Hampshire), proposed drill holes as purple squares (discovery holes) and blue diamonds (resource definition drill holes) at Hampshire, proposed drone magnetics survey as dashed black line, superimposed on geology. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

5.3.4 St Valentines Peak/L11

The St Valentines prospect is a 3km long air magnetics anomaly with two higher magnetic zones.

The anomaly has only tested by three drillholes with 4m of magnetite skarn intersected in VP003 but this was faulted and so magnetite skarn thickness is unknown.

Unknown resource potential, however, if 4m magnetite skarn continues to 100m depth over the strike of the two high magnetic anomalous zones there is 2.0 Mt. If the magnetite skarn is 20m thick over the same strike there is 10.0 Mt.

Recommendations:

(1) Drone magnetics survey over the whole magnetic trend with 2.8skm to be surveyed.

(2) To "discover" a new resource and (possibly) model a JORC Inferred resource would require 13 holes for up to 2500m's. No holes are shown on the following figures as they will depend heavily on the magnetics survey.

(3) It is uncertain as to how many holes would be needed to model the new resource to JORC Indicated status in preparation for mining (i.e. equivalent to Rogetta North).

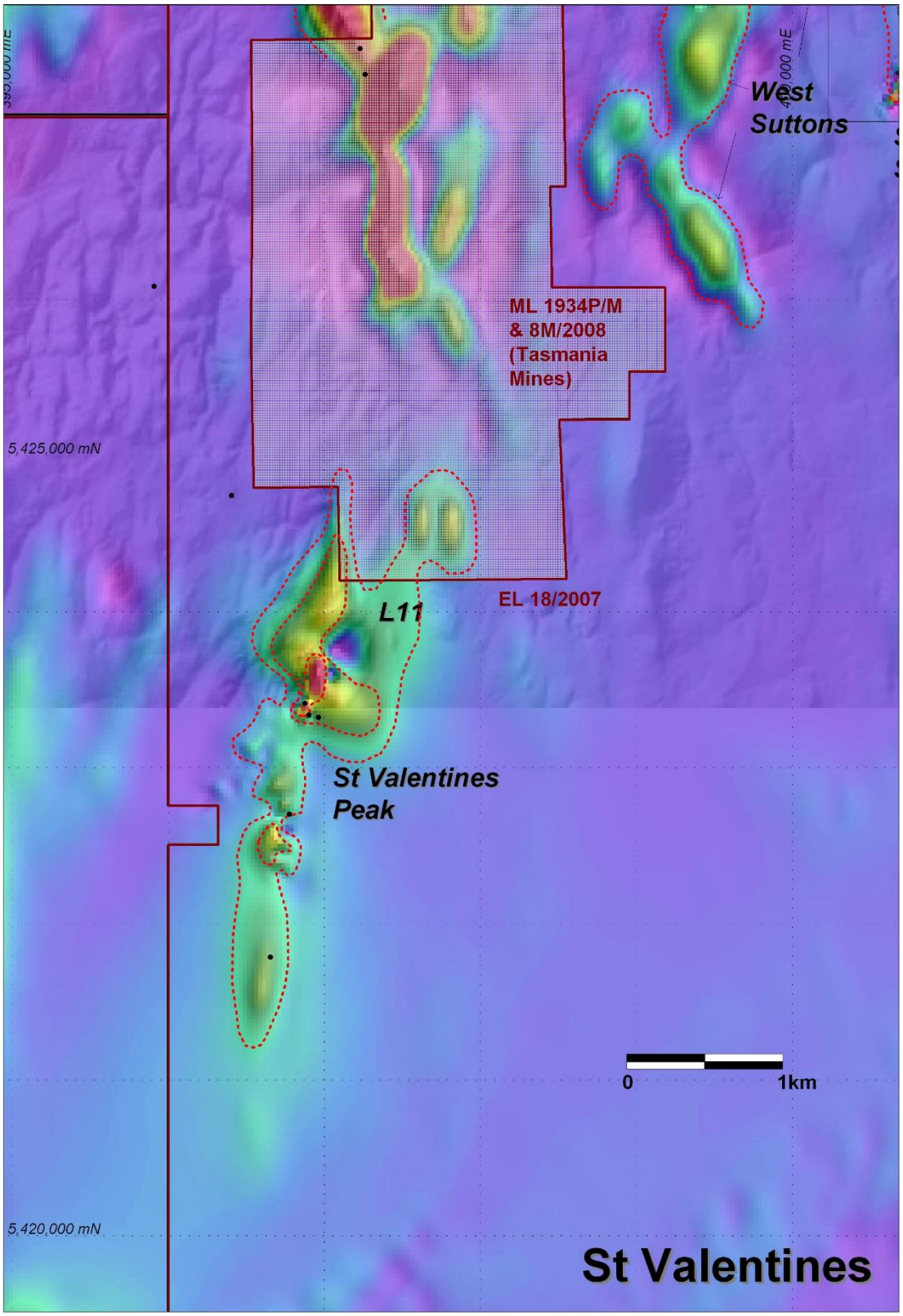

Figure 5.7: St Valentines area showing prospect locations, existing drill holes as black dots, superimposed on 25m RTP TMI image. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

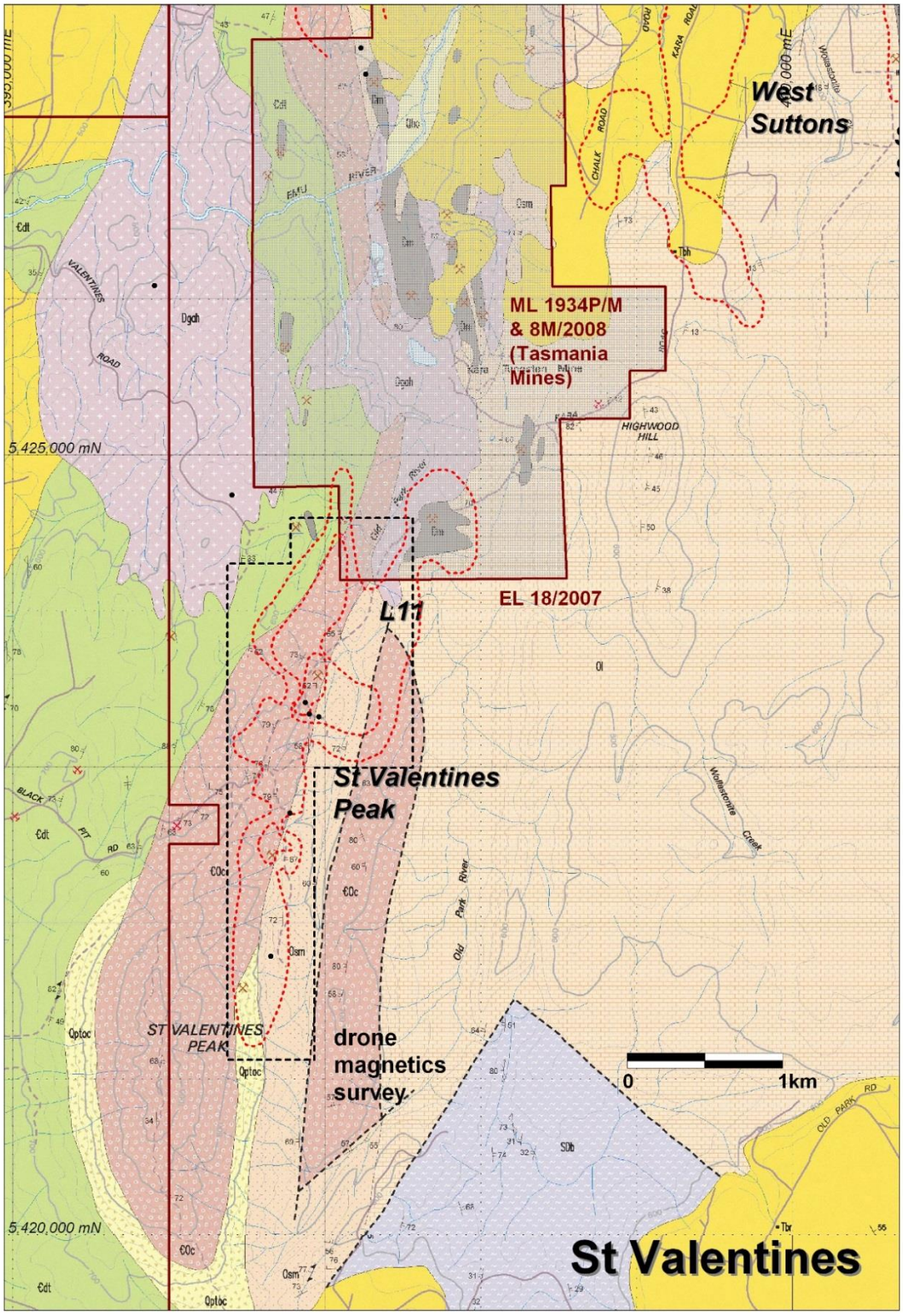

Figure 5.8: St Valentines area showing prospect locations, existing drill holes as black dots, proposed drone magnetics survey as dashed black line, superimposed on geology. Tenements are shown as brown line and text. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

5.3.5 Suttons Skarn

Suttons Skarn is defined by two locations of outcropping magnetite skarn associated with 1km long air and ground magnetics anomalies.

This magnetics data reveals that the Suttons Skarn mineralisation may extend further north under thin cover than shown on existing geological mapping.

There has been no drilling at this prospect but historic shallow auger holes in the two zones intersected magnetite skarn but without assaying for Fe.

In the northern zone skarn was intersected in 12 of the 22 holes with thicknesses ranging up to 7.32m. Unassigned skarn was also intersected in a further 4 holes.

In the southern zone magnetite skarn was intersected in 5 of the 24 holes with thicknesses up to 5.5m. Unassigned skarn was also intersected in a further 6 holes.

3D modelling defines a shallowly west dipping band of massive magnetite skarn of up to 5-7m thick. The shallow auger drilling looks to have tested the skarn on its eastern edge. Future drilling should step to the west of these auger holes.

There is potential for 0.5 – 2.4 Mt magnetite skarn on surface.

Recommendations:

(1) Planning for drilling will benefit from ground or drone magnetics surveys over the whole area with a total area of 0.3km2 to be surveyed

(2) To "discover" a new resource and (possibly) model a JORC Inferred resource would require 12 holes for 900m's.

(3) To model the new resource to JORC Indicated status in preparation for mining (i.e. equivalent to Rogetta North) will require up to further additional 24 holes for 1920m's making a total of 36 holes for 2820m's).

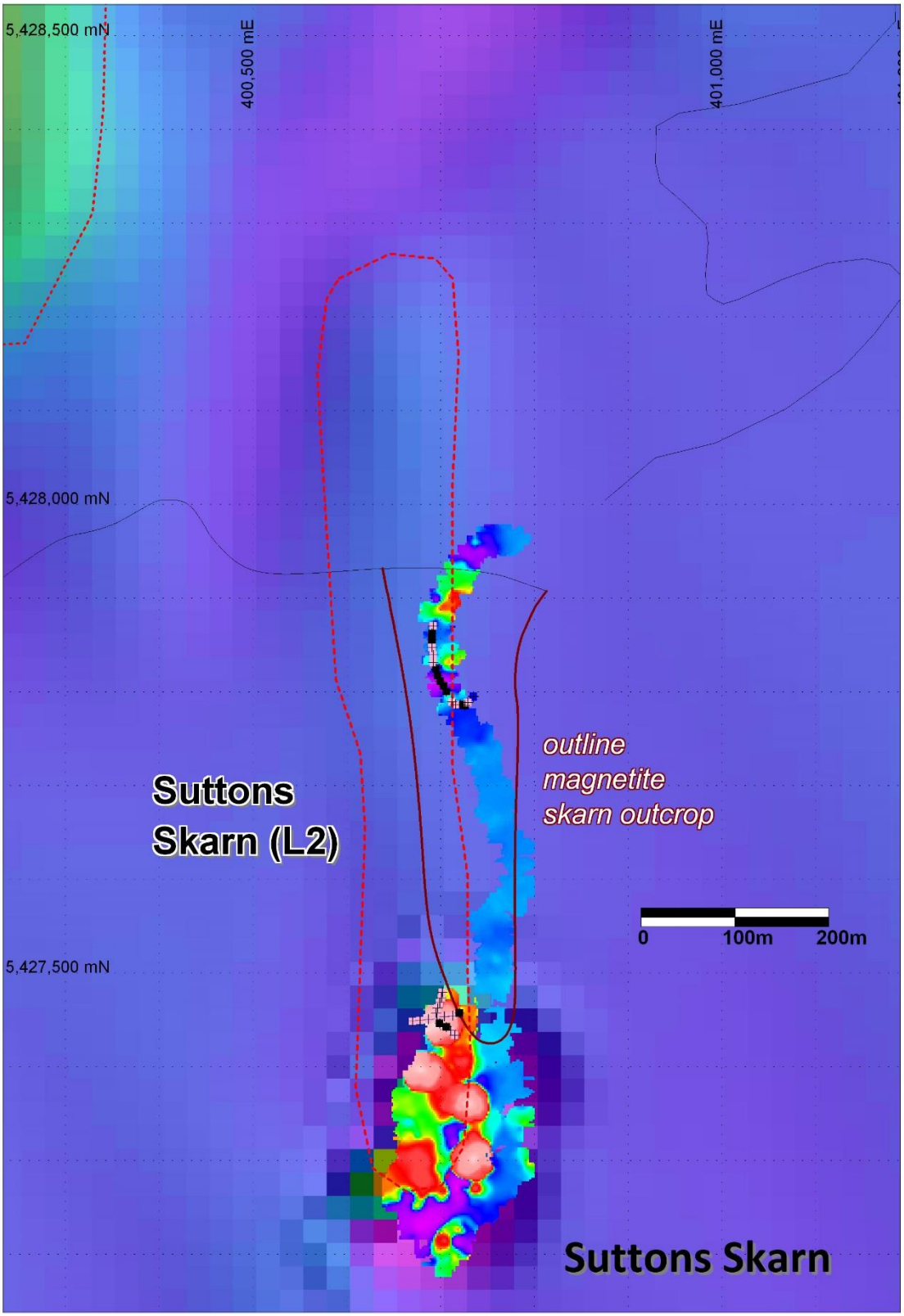

Figure 5.9: Suttons Skarn showing area of outcropping magnetite skarn, existing shallow auger holes, and ground magnetics superimposed on 25m RTP TMI image. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

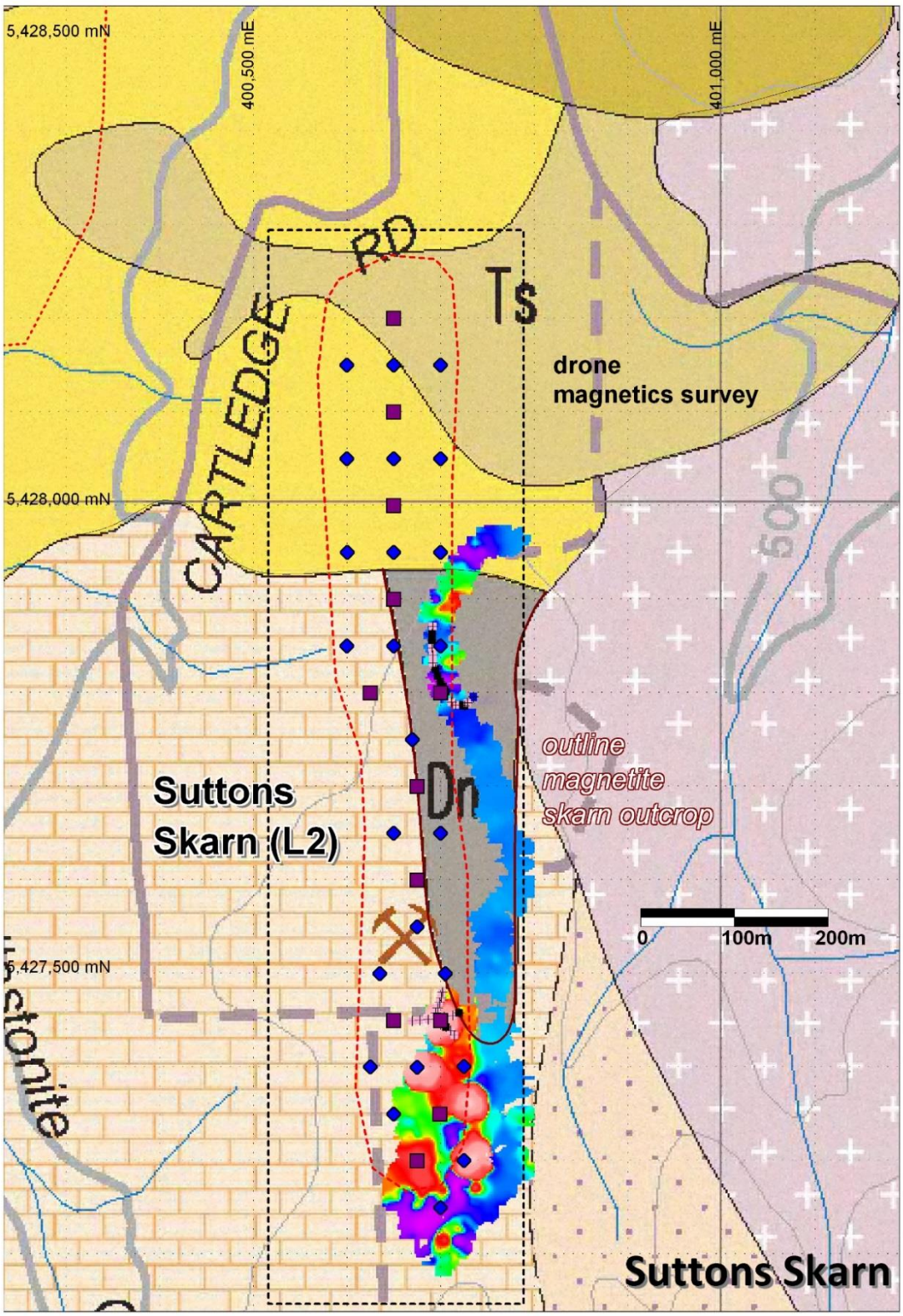

Figure 5.10: Suttons Skarn showing current (shallow auger) holes as black crosses, proposed drill holes as purple squares (discovery holes) and blue diamonds (resource definition holes), proposed drone magnetics survey as dashed black line, and ground magnetics superimposed on geology. Red dashed line is 25m RTP TMI anomalies outline used as reference line.

6.0 Proposed Works Programme 2017/18 year

It is proposed to carry out the drone magnetics work and discovery holes drilling in the coming period.

7.0 Expenditure

Exploration expenditure for EL 18/2007 for the period July 2016 to July 2017 was $16,772 bringing the total to date to $4,383,284.

	$
Geology	12,000
Geochemistry	0
Geophysics	0
Remote Sensing	0
Drilling	0
Gridding	0
Land Access	0
Rehabilitation	0
Feasibility Studies	0
Other	4,372
Administration	400
Total	16,772

8.0 Environmental

Environmental disturbance on EL18/2007 during the reporting period was negligible.

Existing infrastructure access was utilised for site visits.

9.0 References

Brandt, R.T., ANZECO report on the results f explration on Exploration Licence No. 17/68 – October 1971 to May 1974. Unpub. Report.

Callaghan, TJ, 2011. Combined Annual Report for Blythe River Project EL6/2005, EL15/2006, EL18/2007, EL53/2007 and EL25/2009. Forward Mining Ltd. Unpub. Report.

Callaghan, TJ, 2011. Kara No. 2 North Mineral Resource Estimate NW Tasmania. Forward Mining Limited. Unpub. Report.

Callaghan, TJ, 2012. Blythe River Project Annual Report EL18/2007 Hampshire 2 NW Tasmania. Forward Mining Limited. Unpub. Report.

Callaghan, TJ, 2013. Blythe River Project Annual Report EL18/2007 Hampshire 2 NW Tasmania. Forward Mining Limited. Unpub. Report.

Callaghan, TJ, 2013. Blythe River Project Partial Relinquishment Report EL18/2007 Hampshire 2 NW Tasmania. Forward Mining Limited. Unpub. Report.

Kusnander K., Mayer A., Zlatkov G., 2009. Blythe Project Northern Tasmania Annual Report for EL18/2007 ("Hampshire 2"). Iron Mountain Mining Limited. Unpub. Report.

McCormack, R., 2015. Geophysical Assessment of Potential Magnetite Skarn Mineralisation at the L13 Prospect, Highclaire, Northwest Tasmania. UTAS Thesis.

McKeown, M.V., 1994. Review of the geology of the Kara area. EL 39/1989. Tasmania Mines Limited Unpub. Report.

Tear, S., 2011. Independent Geologist's Report Exploration Properties in NW Tasmania, Forward Mining Limited. Hellman & Schofield Pty Ltd., Unpub. Report

Whitehead, C.H., 1985 Preliminary review of the potential magnetite resources Kara properties – 17/68. Tasminex NL. Unpib. Report.

Whitehouse, G.K. 2015. Lottah Mining Pty Ltd Rogetta North Resource Assessment March 2015.