Lottah Mining Pty Ltd
Annual Report on exploration on
EL 18/2007 “Hampshire 2”
July 2016 to July 2017

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Abstract

Work Completed on EL18/2007 during the period of July 2016 – July 2017 has consisted of a comprehensive compilation of previous exploration including existing airborne and ground magnetics surveys.

Reconnaissance field mapping was conducted at the L13, Suttons Skarn and Wollastonite Creek prospects. Magnetite skarn was found at L13 and Suttons Skarn. At Wollastonite Creek magnetic anomalies appear to be due to basalt though this interpretation remains open.

Interpretative sections were generated for the L13 prospect which appear to indicate that the L13 prospect may have sufficient depth potential to justify drilling.

Work proposed 2017/18 year will consist of the following.

- Ground magnetics and drilling at the Suttons Skarn and L4 prospects.
- Drilling L13 prospect.
- Continue assessment and drilling L11/St Valentines Peak trend.
- Further address magnetics anomalies between Suttons Skarn and L4 areas.

The size of the ground magnetics surveying is yet to be determined.

Total drilling proposed is 8 - 12 holes nominally 50m each (depending on results) i.e. 400-600m.

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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.

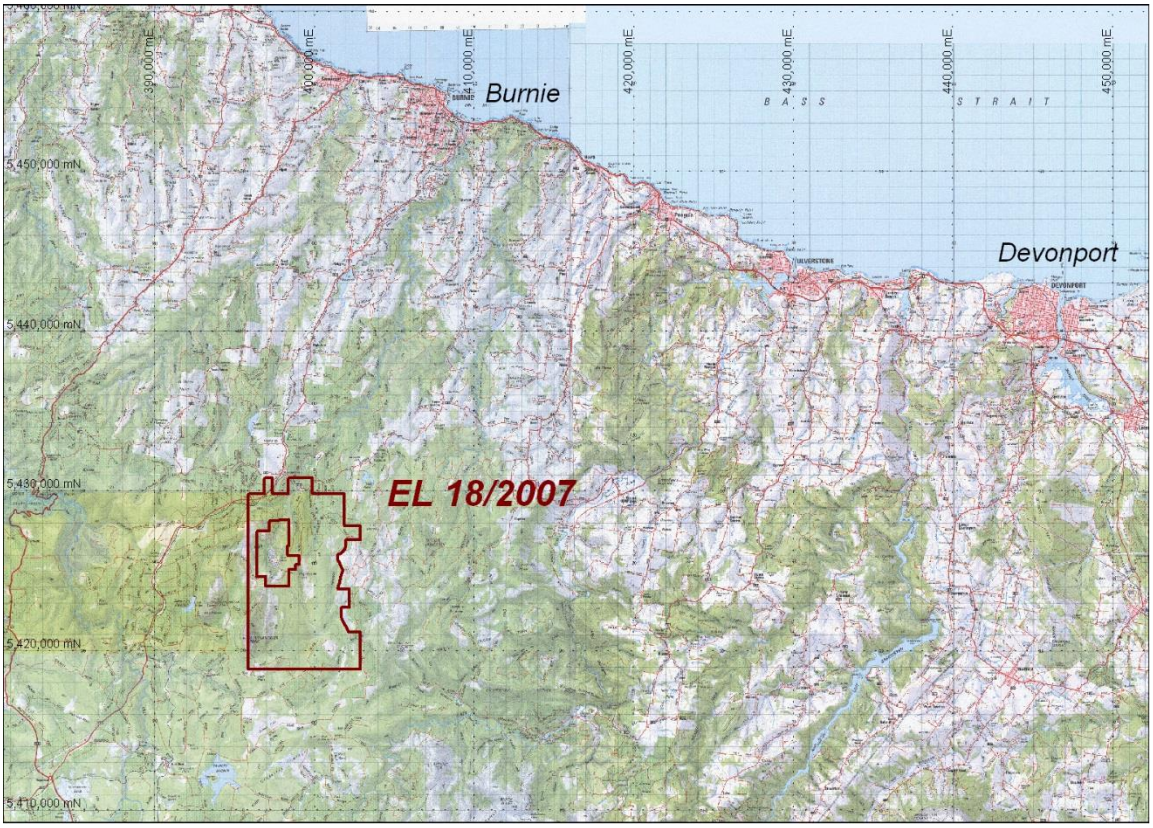

Figure 1.1: EL 18/2007 location.

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.

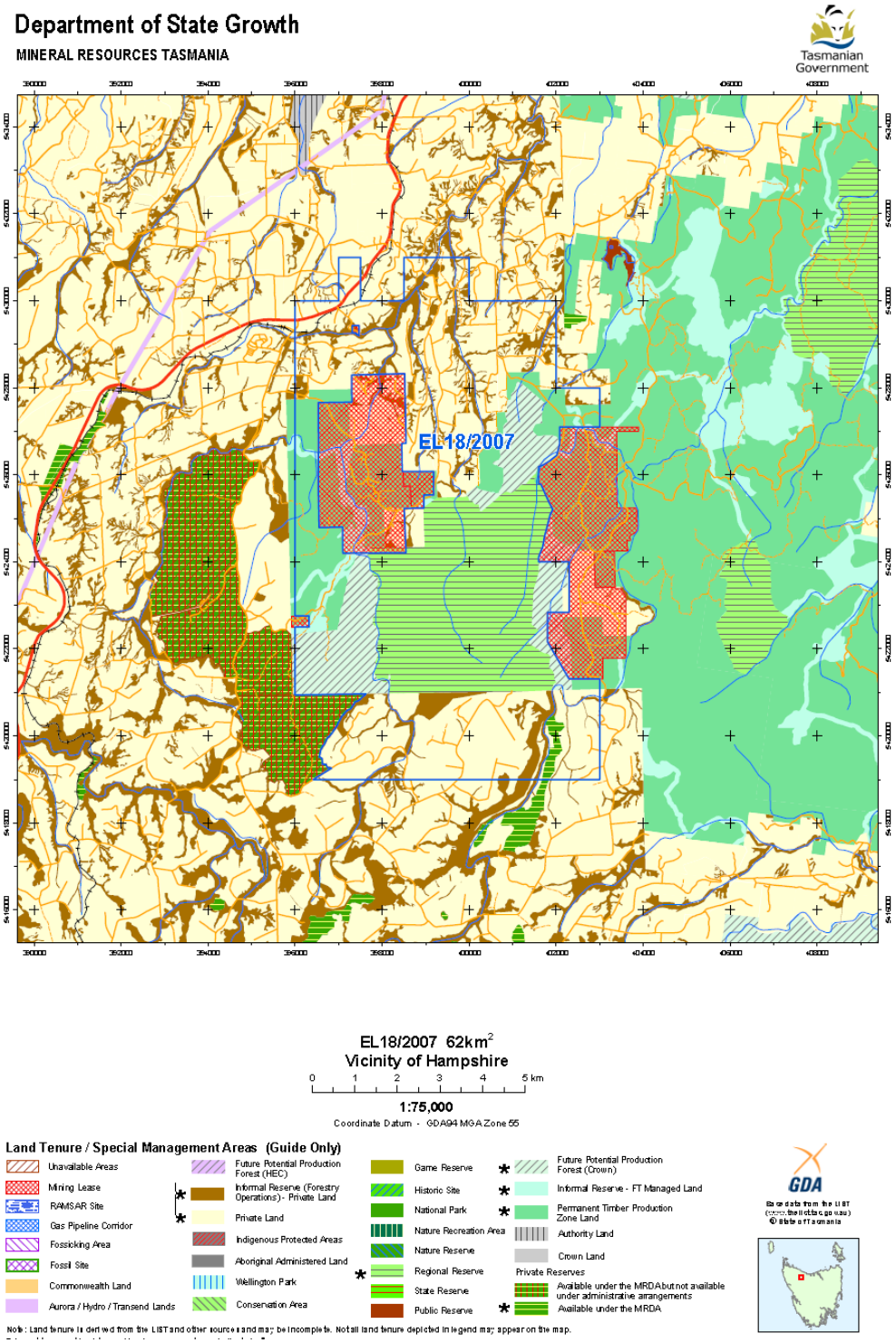

Figure 1.2: Land tenure of EL 18/2007

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).

4.0 Exploration completed during the reporting period July 2016 to July 2017

4.1 Introduction

Work on EL18/2007 during the period of July 2016 – July 2017 has consisted of the following;

- Comprehensive compilation of previous exploration work with the downloading of all relevant reports from MRT's website and the construction of a drillhole database.
- Compilation of existing airborne and ground magnetics surveys.
- Reconnaissance field mapping at L13 prospect and generation of drill programme.
- Reconnaissance field mapping at Suttons Skarn prospect in preparation for proposed ground magnetics survey.
- Reconnaissance field mapping in Wollastonite Creek area.

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 advanced but ongoing.

4.3 L13

Reconnaissance field mapping was undertaken at the L13 prospect to follow-up the magnetic anomalies defined in the 2015/16 UAV magnetic survey and to assess the first pass drilling programme planned.

Mapping located outcropping magnetite bearing skarn corresponding to the central and southern magnetic peaks. The northern peak was shown to correspond to outcropping basalt.

Existing auger holes were georeferenced and the geology from these holes (not assayed for Fe) input into the database.

4.4 Suttons Skarn

Data compilation and appraisal of existing geophysics, particularly magnetics, was carried out in the process of compiling all regional exploration data..

Reconnaissance field mapping was undertaken at the Suttons Skarn prospect in preparation for a ground magnetics survey over this strike length with drilling to follow.

In addition historic auger holes were georeferenced and the geology from these holes (not assayed for Fe) input into the database.

4.5 Wollastonite Creek

A number of magnetic highs extend in a meandering south-southeast orientation across Wollastonite Creek and thence down the Kara Road. For the most part these magnetic anomalies correspond with mapped basalt but in a few locations the mapped geology is basement Moina Sandstone or Gordon Limestone.

Reconnaissance field mapping was undertaken to determine whether the mapping as shown is correct and to attempt to explain the magnetic anomalies.

5.0 Discussion

5.1 Introduction

The work detailed above is largely ongoing and the following discussion of results is a summary of where work is at this present.

5.2 Data compilation

Data compilation is both assisted and hindered by Mineral Resources Tasmania's database. Searches have been made under prospect name, drillhole name, licence number and reports.

These combined searches and reading and researching of historic reports indicates that there are some significant deficiencies in the Mineral Resources Tasmania's database such that it is useful as guide but cannot be relied upon.

The compilation has revealed unlisted drillholes, drillholes with incorrect collar coordinates and summaries and numerous reports detailing work on prospects not listed in the relevant searches.

This is not meant to be a criticism rather a warning.

5.3 L13

The best geological map of the L13 prospect would appear to be that in plate 7 of Brandt (1974) [74_1035]. This plan shows skarn (= 'tactite') occurring in two zones.

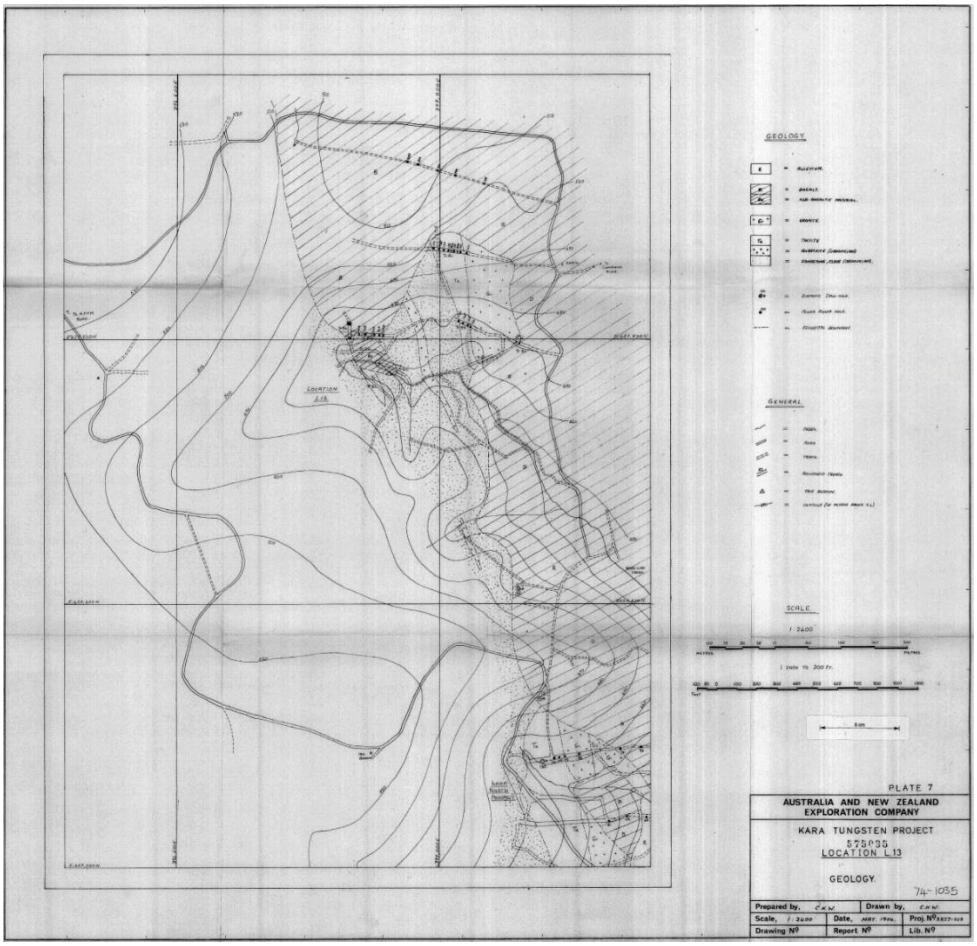

Figure 5.1: L13 area geology and auger hole locations (Brandt, 1974)

The geology from Brandt (1974) figure 7 was digitised and is shown on figure 5.6. This geology shows the L13 prospect to lie along strike from the Kara No.1, Western Limb and Kara North deposits. These deposits occur on the steep western limb of a north-south trending synclinal fold in the Cambro-Ordovician sequence where the western limb is either steeply overturned (dipping to the west) or dips steeply to the east and the eastern limb dips shallowly to the west.

Whitehead's (1985) schematic section "5780N" (= 5,475,780mN AGD66) illustrates this folded geology (bear in mind here 'ore' refers to scheelite bearing skarn, however, there is a very strong relationship between scheelite mineralisation and magnetite–rich skarn). In this section the shallow eastern limb is shown sub-horizontal and semi-concordant to the roof of the Housetop Granite.

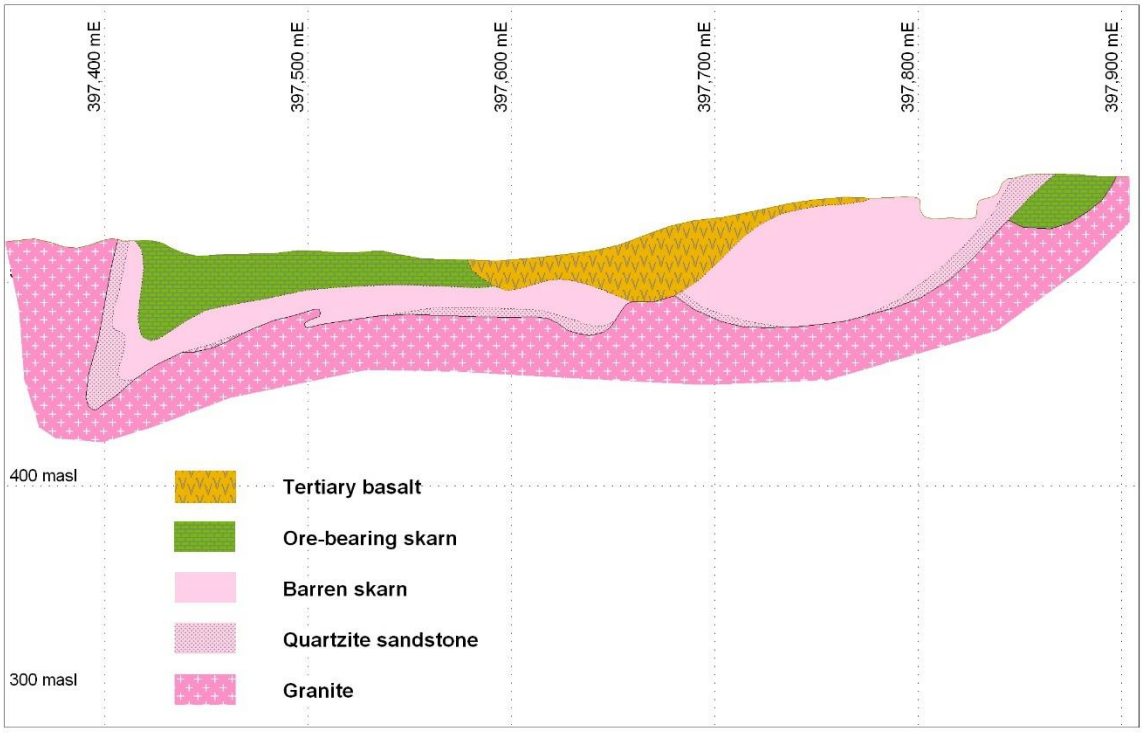

Figure 5.2: Cross-section through Kara deposit on AGD66 northing 5,475,780mN (Whitehead, 1985)

The plunge of this fold axis and parallel fold axes is not described but must be sub-horizontal given the structural data shown on geological plans. This section has been digitised (figure 5.2) as a possible template for the structure at L13.

McKeown (1994) also shows these fold trends (figure 5.3).

Auger hole coordinates were determined from plate 7 (Brandt, 1974) with the auger holes geology sourced from anon. [74_1013] and shows that the auger holes were drilled on essentially three (MGA94) northings, 5,428,000mN, 5,428,125mN and 5,428,250mN.

Drill sections have been created for each of these northings with the ground magnetics profile superimposed (in figures 5.7, 5.8 and 5.9).

Brandt's (1974) map shows two zones of 'tactite' outcropping on section 5,428,000mN separated by sandstone. Auger holes intersect magnetite bearing skarn in both of these zones. On section 5,428,125mN only the eastern zone outcrops and has been tested by auger holes with the western zone obscured by basalt and not drilled. On section 5,428,250mN basalt completely obscures the prospective geology and no auger holes intersect definite skarned rocks.

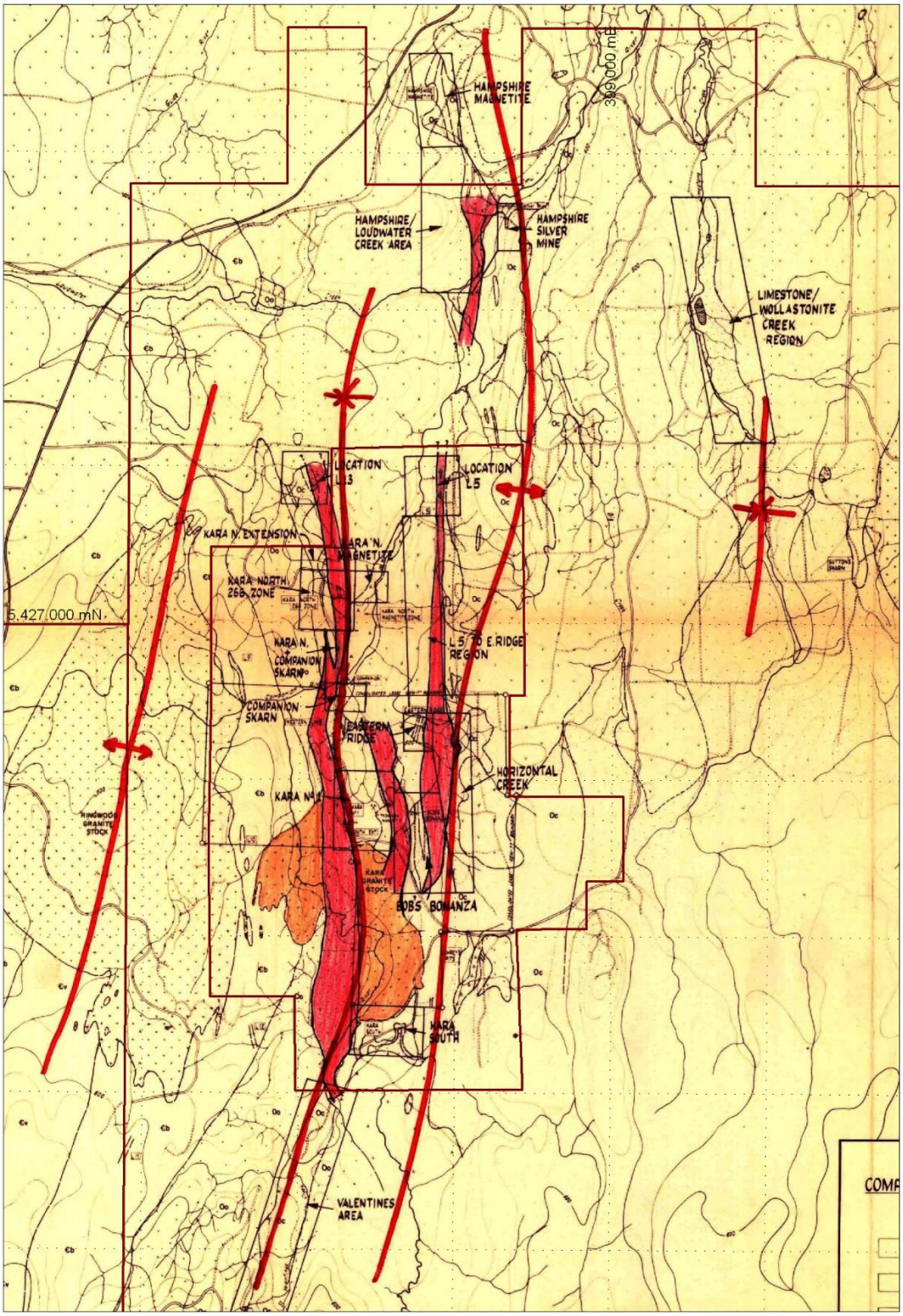

Figure 5.3: Structural trends as interpreted by McKeown (McKeown, 1995)

The lack of structural data from drilling and the very sparse ambiguous outcrop makes interpretation difficult. The Whitehead (1985) section 5780 fold geometry is used on each section to attempt to model the subsurface geology.

Figure 5.4: Legend for sections and plan.

On Whitehead's (1985) section the horizontal part of the granite margin is at about 480masl with the base of the 'ore-bearing' skarn at 500masl.

These two surfaces have been simplified/smoothed and projected north-northwestwards along the local strike of bedding.

On section 5,428,000mN auger holes penetrate up to 60m below the projected granite margin without intersecting any granite indicating the granite margin must be deeper here. Further the intersection of the skarned rocks deeper than 480masl indicates that the synclinal fold probably has a shallow northerly plunge.

On section 5,428,125mN auger hole 138A intersects granite at the end of the hole at around 480masl, coincident with the RL of the granite margin on section 5780 though adjacent holes 137, 135 and 205 intersect skarn (inc. magnetite) a further 5m below this.

On section 5,428,250mN auger hole 203 intersects granite at 22m downhole corresponding to an RL of 488masl consistent with the RL of the granite margin on section '5780'.

From the three sections it is unclear whether the granite margin retains a consistent RL in the L13 area.

These interpretations are made more complex by the notion that many of the granite occurrences in the Kara region may be sub-vertical dykes (McKeown, 1994). This would explain intersections in 138A on section 5,428,125mN and possibly the intersection of skarn in auger hole 142 on section 5,428,000mN.

The structural complexity remains unresolved, however, the above analysis and discussion provides some encouragement that the magnetite bearing skarned rocks at L13 may have

sufficient depth extent to allow development of an orebody of sufficient size to warrant further drilling.

Drilling is proposed to test the skarned sequence at greater depth and over the full strike length of the magnetic anomaly.

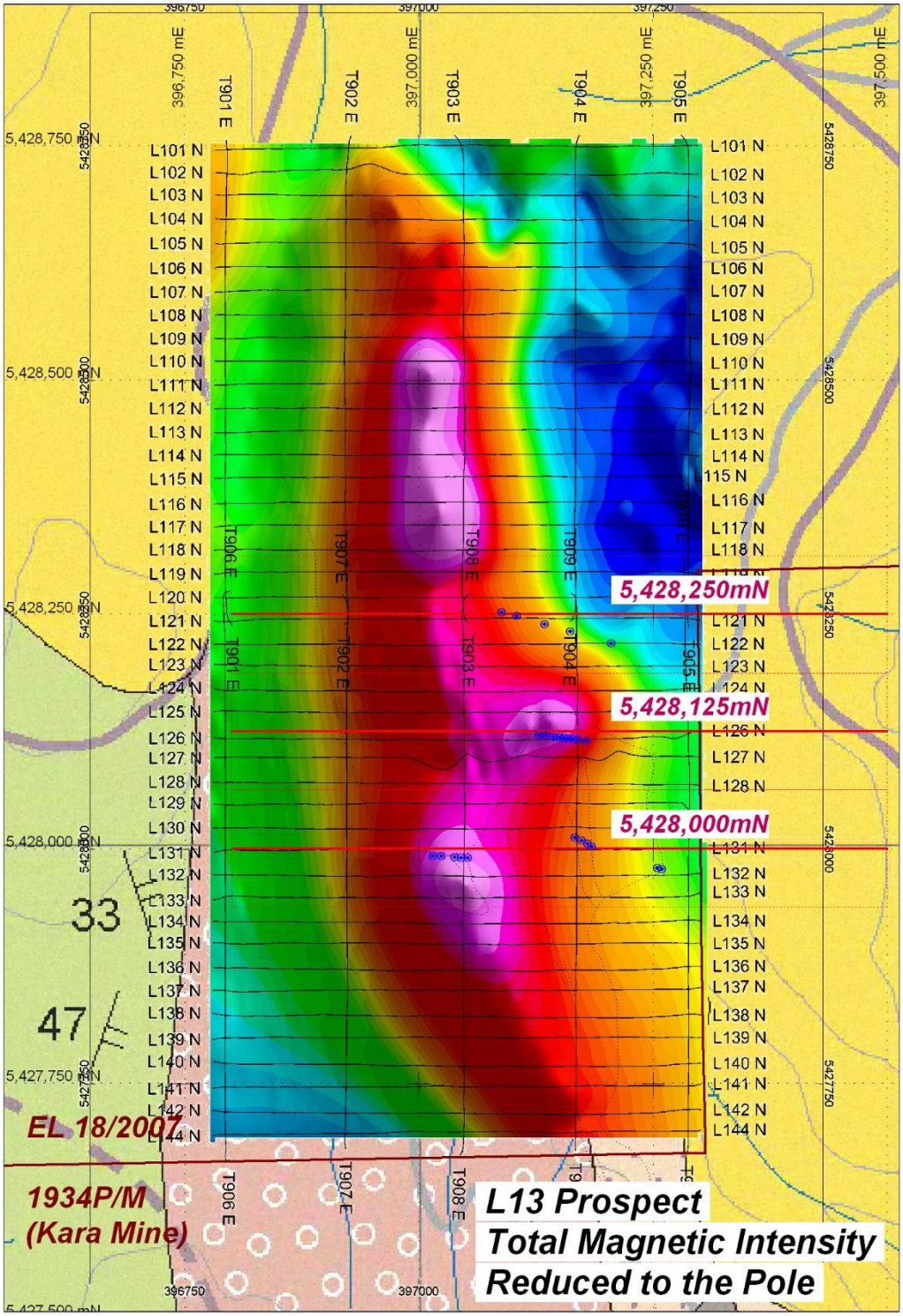

Figure 5.5: L13 prospect showing magnetics, auger holes and location of drill sections.

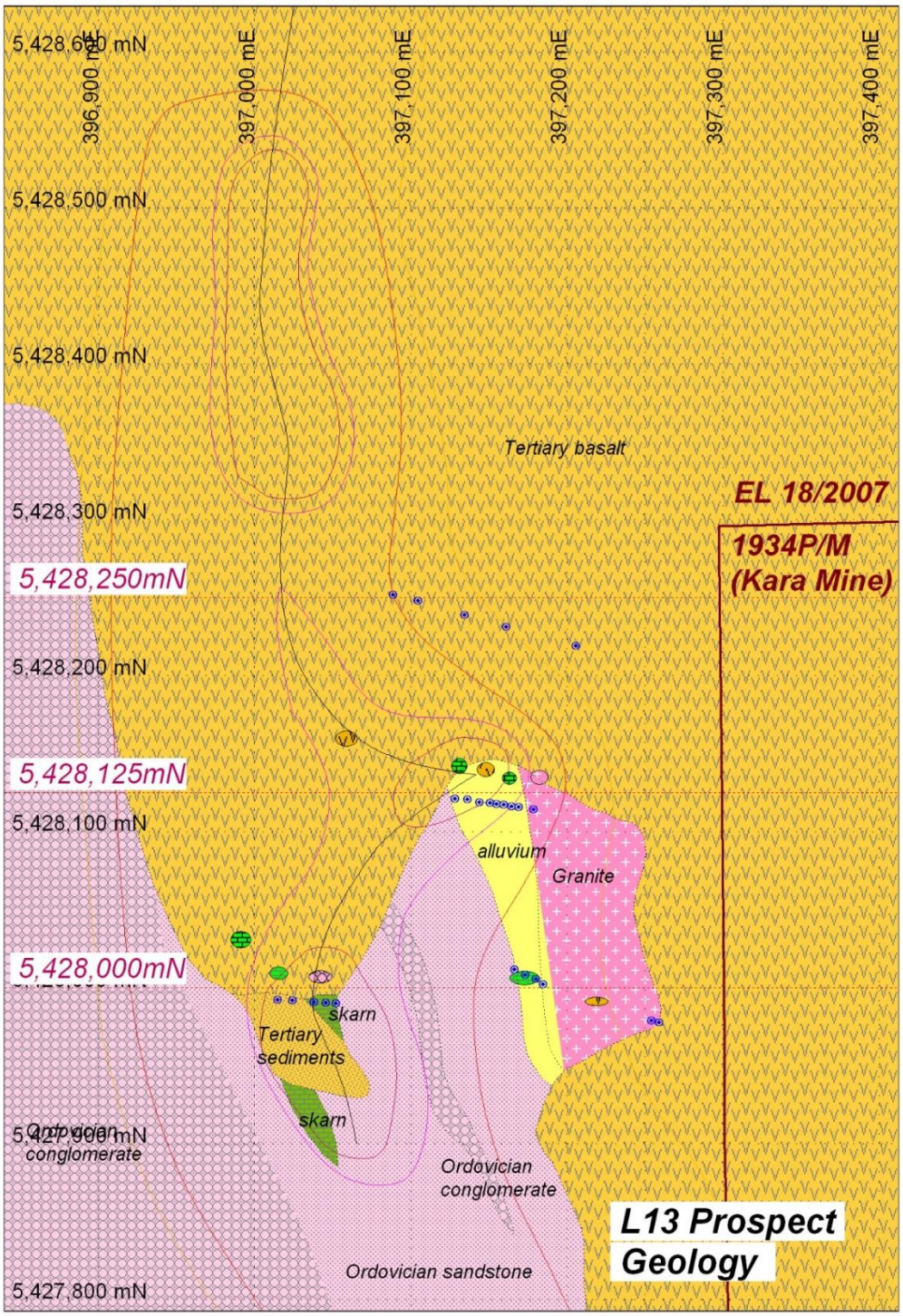

Figure 5.6: L13 prospect geology, auger hole locations and outcrop.

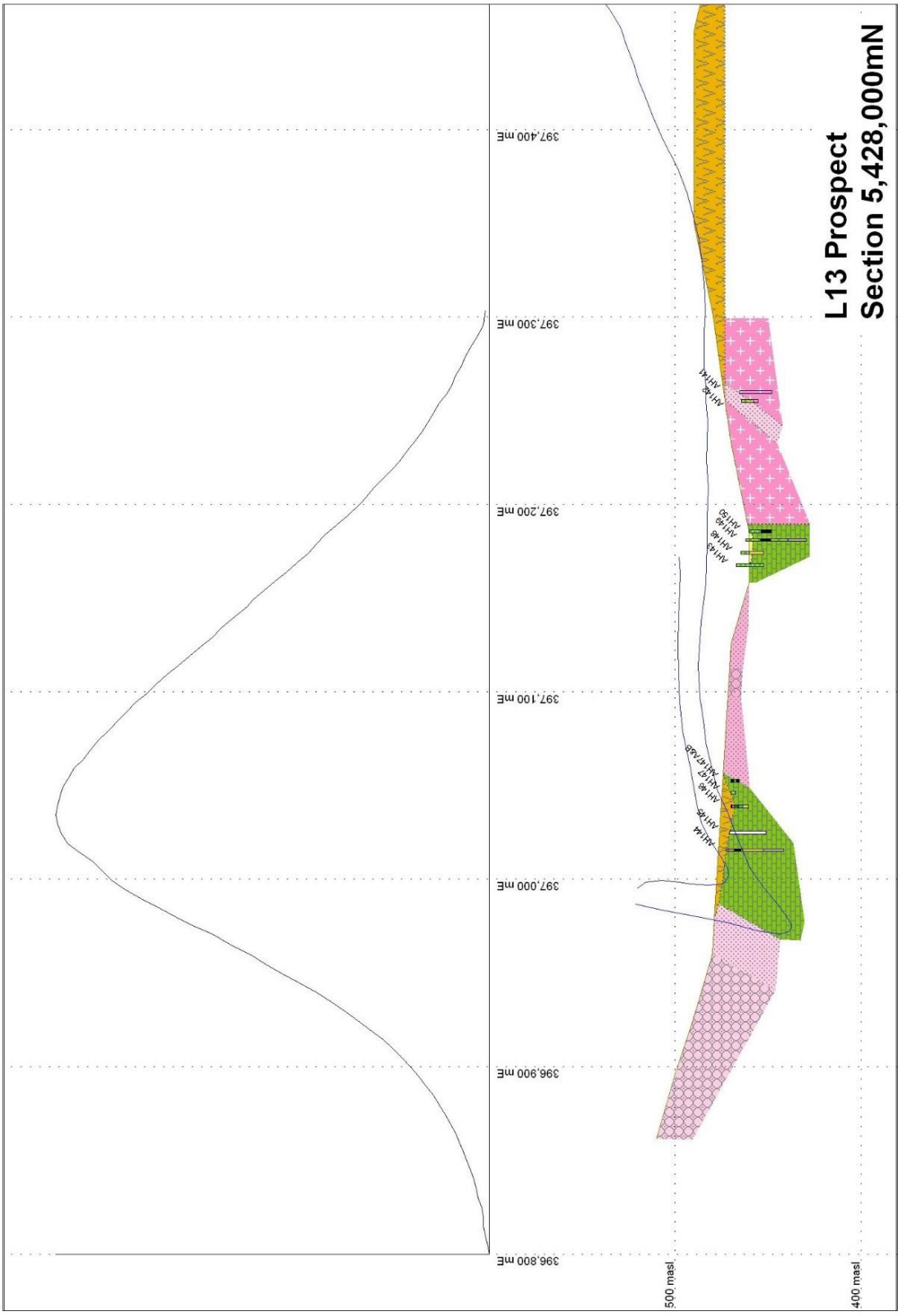

Figure 5.7: L13 prospect section 5,428,000mN. Lower part shows auger hole and interpreted geology with Whitehead (1985) section interpretation in blue lines. Upper part is magnetics profile taken from the drone survey.

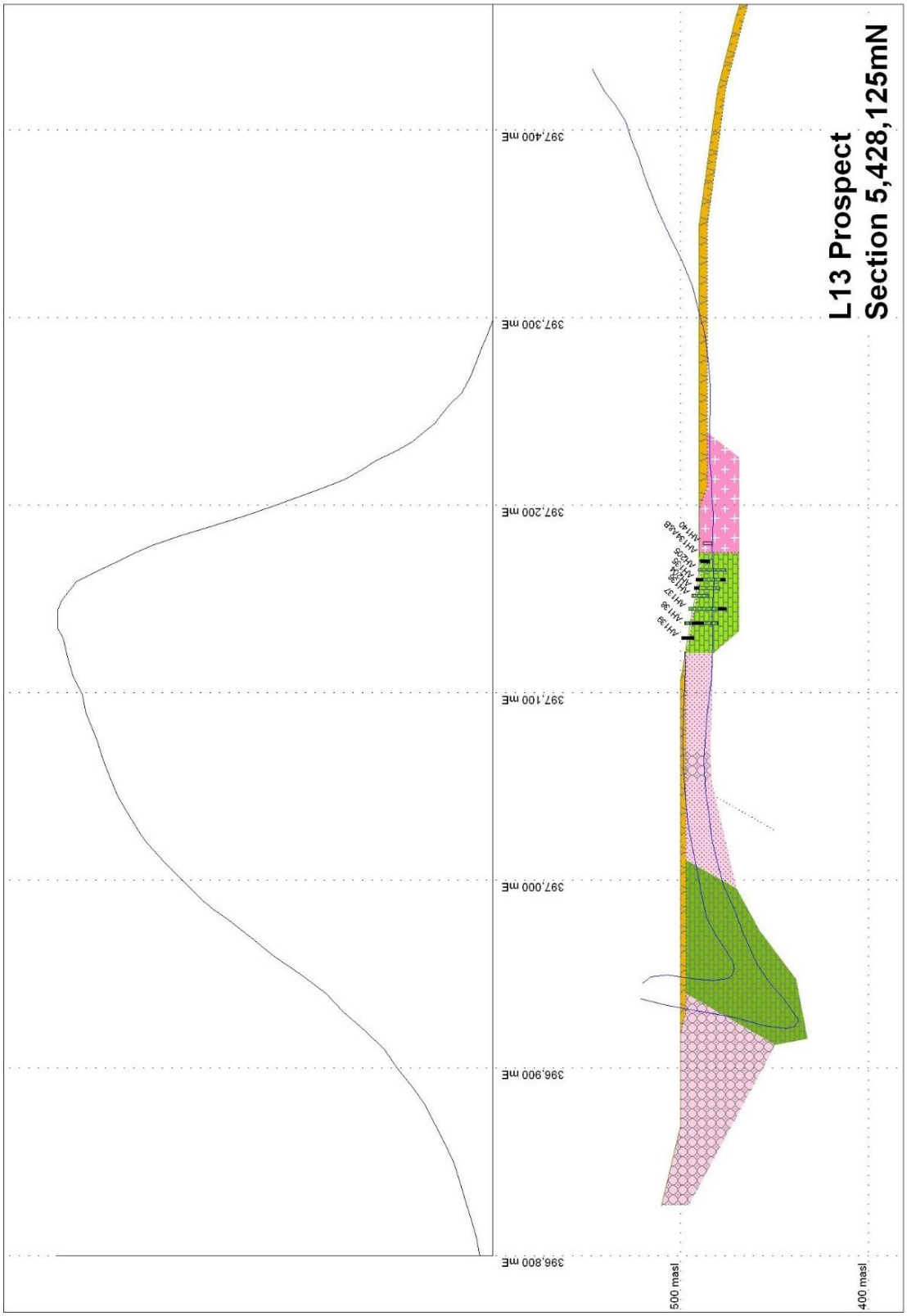

Figure 5.8: L13 prospect section 5,428,125mN. Lower part shows auger hole and interpreted geology with Whitehead (1985) section interpretation in blue lines. Upper part is magnetics profile taken from the drone survey.

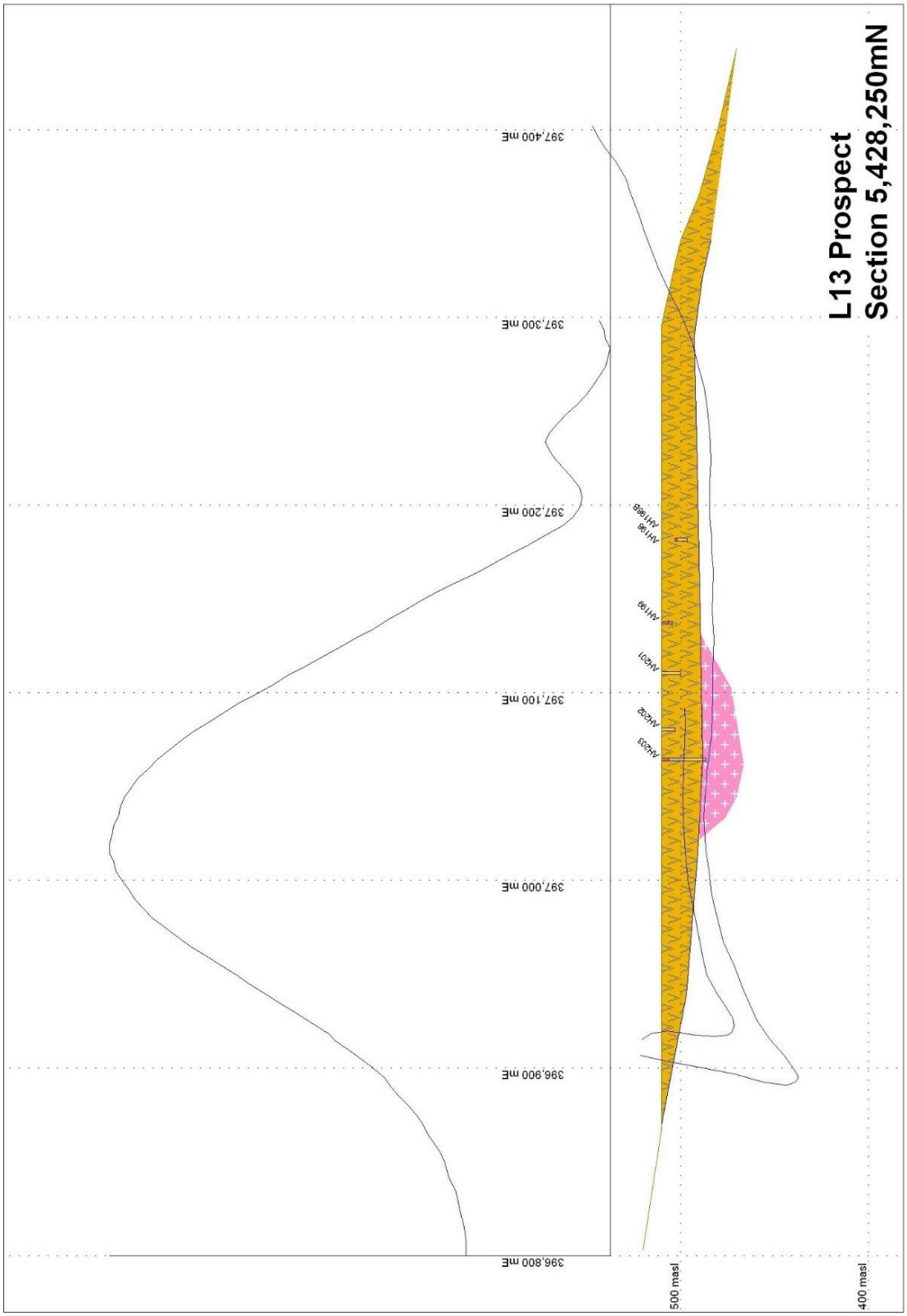

Figure 5.9: L13 prospect section 5,428,250mN. Lower part shows auger hole and interpreted geology with Whitehead (1985) section interpretation in blue lines. Upper part is magnetics profile taken from the drone survey.

5.4 Suttons Skarn

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

Historic auger holes (logs in 74-1013) were georeferenced (locations on plate 12 in 74_1035) and the geology from these holes input into the database.

The auger holes were drilled in two locations.

The northern holes made a number of magnetite skarn intersections.

Nearly all holes ended in sandstone, the exception being 180 and 181 which finished in granite (easternmost holes in the northern zone), and 169A and 175 which finished in skarn.

In the northern zone skarn was intersected in 10 of the 24 holes with thicknesses ranging from 0.9m to 7.32m. No non-magnetite bearing skarn was intersected.

In the southern zone skarn was intersected in only 11 of the 29 holes of which only 3 were magnetite bearing.

The magnetics anomaly appears to define a zone 1,000m long by 100-150m wide.

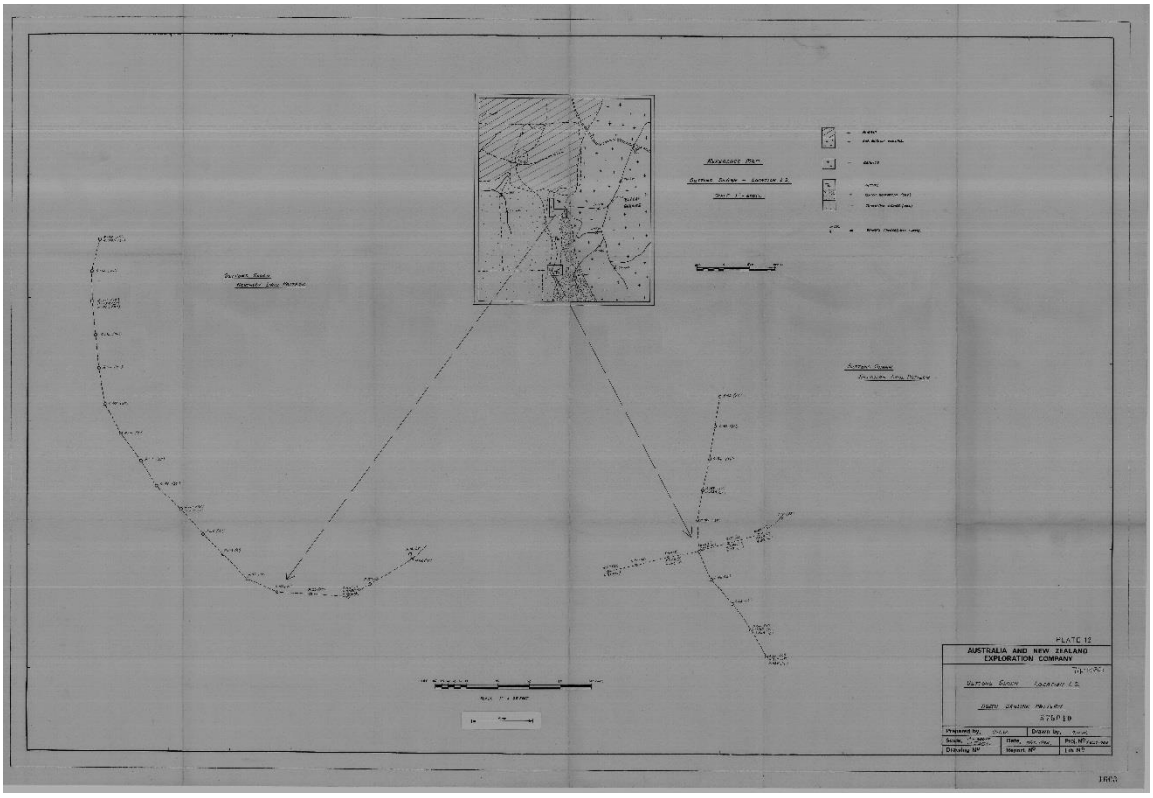

Figure 5.10: Suttons Skarn prospect showing auger hole locations (anon. 74_1013).

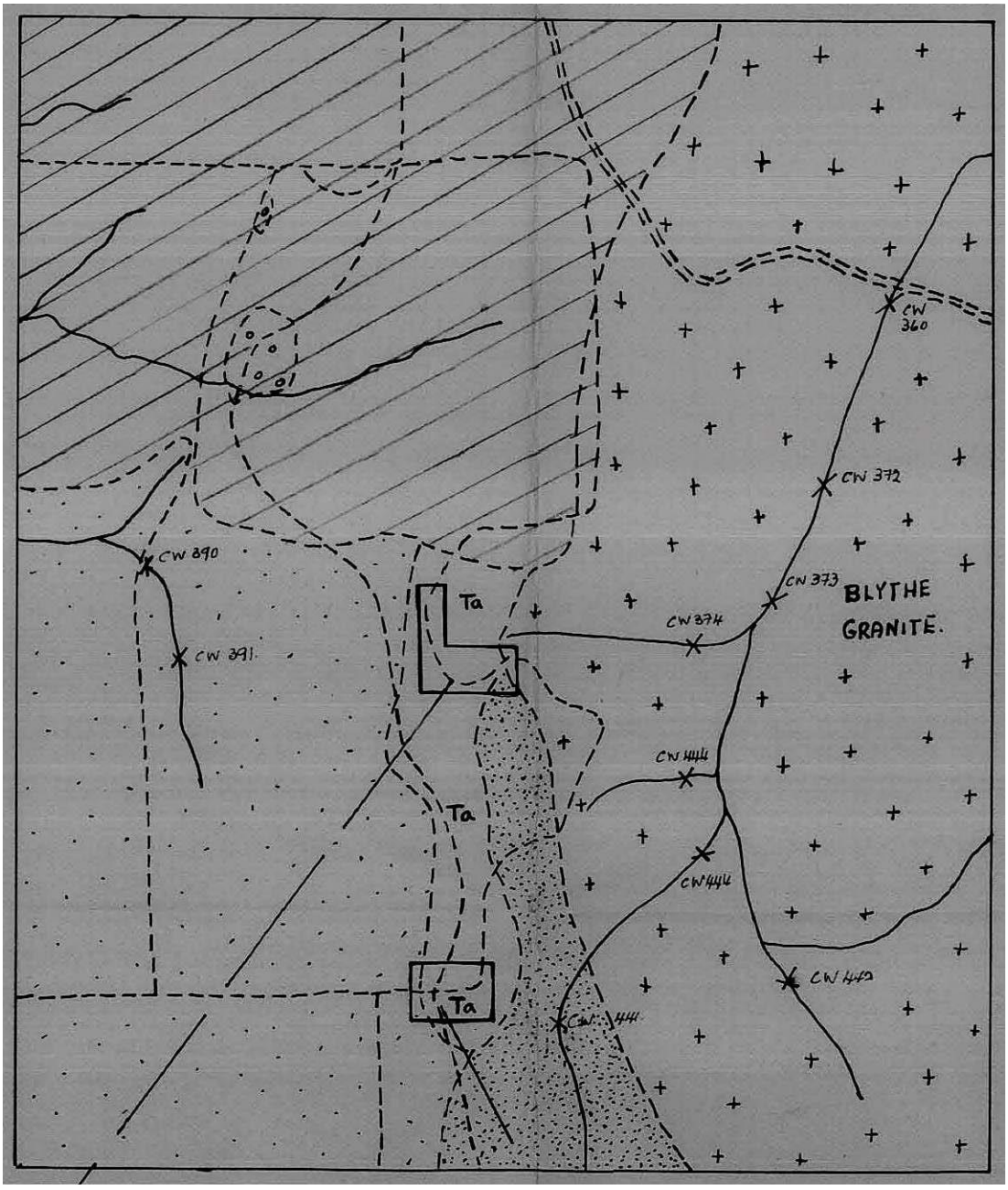

Figure 5.11: Suttons Skarn prospect close-up showing geology (anon. 74_1013).

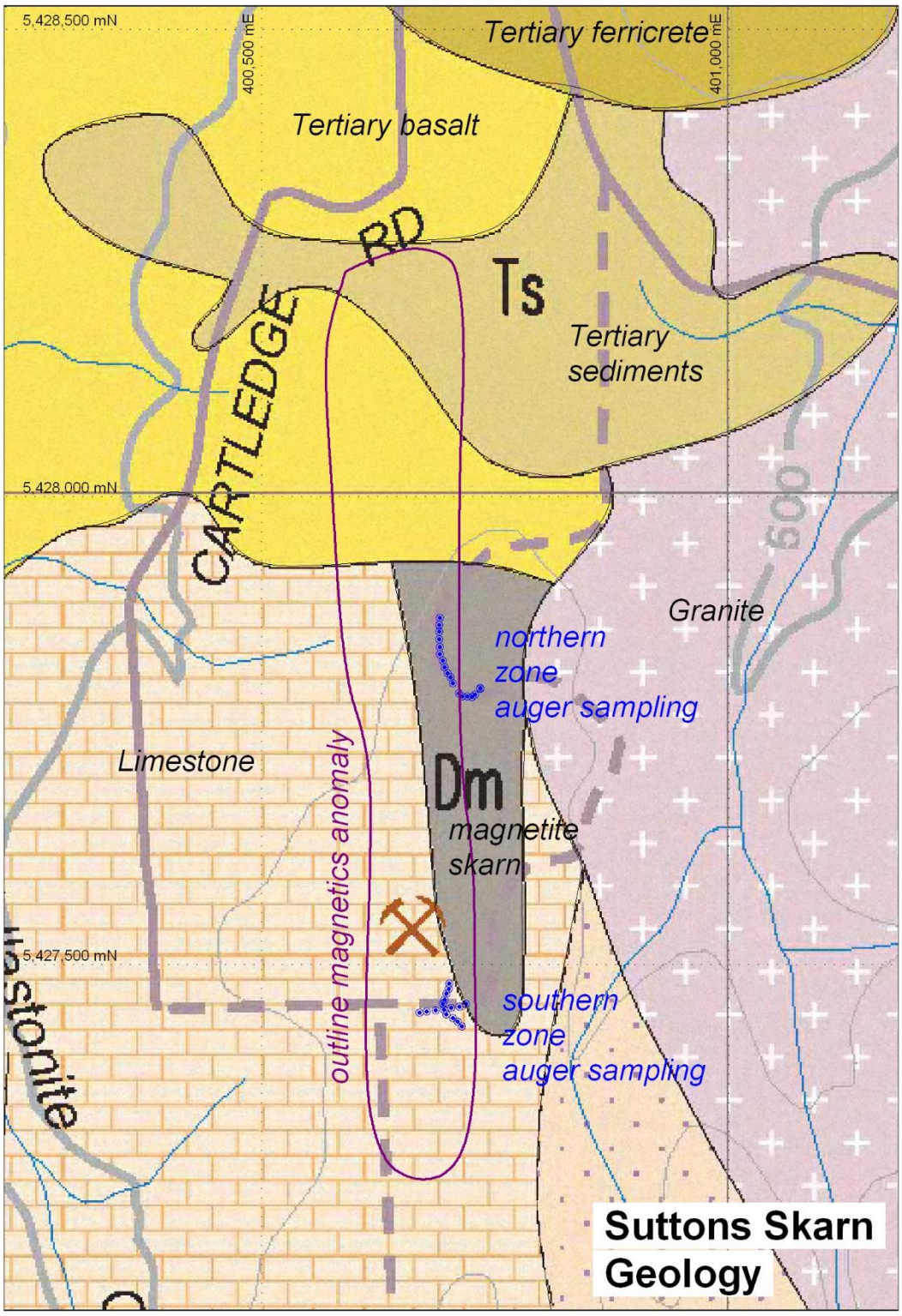

Figure 5.12: Suttons Skarn prospect geology showing auger hole locations and outline magnetics anomaly.

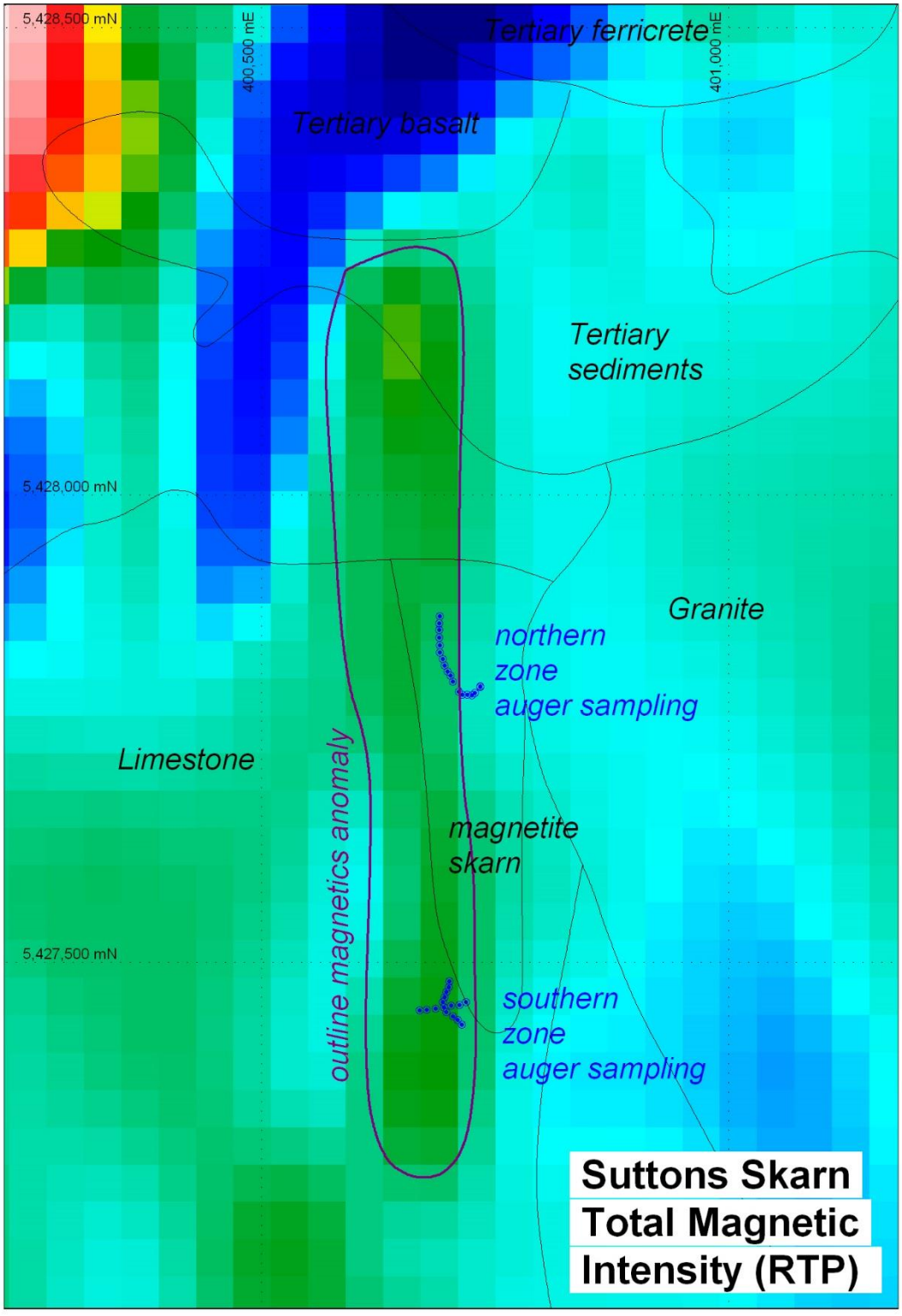

Figure 5.13: Suttons Skarn prospect total magnetic intensity (with geology after "Loyetea" 1:25,000 sheet overlain).

5.5 Wollastonite Creek

Reconnaissance field mapping work showed the existing MRT mapping to be incorrect in two locations with outcropping basalt located where mapping suggested the rocks should be Ordovician sediments.

The source of the magnetic anomalies remains unexplained but appears to be more likely due to a thick basalt flow filling a palaeo-topographic low than magnetite bearing skarn, however, further reconnaissance mapping work is necessary to confirm this interpretation.

6.0 Proposed Works Programme 2017/18 year

Further resources exist to be defined at the L4, L13, Suttons Skarns and L11/St Valentines Peak prospects. Work is proposed at all four areas in the next 12 months.

Potential also exists north of L13.

We are also intrigued by magnetic anomalies in the western part of the licence and will address their potential beneath basalt cover.

Work proposed 2017/18 year will consist of the following.

- Ground magnetics and drilling at the Suttons Skarn and L4 prospects.
- Drilling L13 prospect.
- Continue assessment and drilling L11/St Valentines Peak trend.
- Further address magnetics anomalies between Suttons Skarn and L4 areas.

The size of the ground magnetics surveying is yet to be determined.

Total drilling proposed is 8 - 12 holes nominally 50m each (depending on results) i.e. 400-600m.

7.0 Expenditure

Exploration expenditure for EL 18/2007 for the period July 2016 to July 2017 was $40,150 bringing the total to date to $4,366,352.

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

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