



Relinquishment Report
for portions of
EL31/2011 Great Musselroe River
for the Period to 4 December 2013

Author: P W ASKINS, MSc MAusIMM CP Geo

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PAUL W ASKINS
GEOLOGY

ABSTRACT

This report describes the exploration activities completed within the relinquished portions of EL31/2011 from grant in 2011 until 4 December 2013. Two portions of EL31/2011 still remain, and are not subject to this report.

The Tenement is located generally north, east, and south of Gladstone, which is a small mining town located 140 km east of Launceston, in north-east Tasmania, Fig.1.

The retained part of the tenement covers a number of past producer alluvial tin mines and many known alluvial tin deposits, but there are no recorded mineral deposits in the relinquished portions.

The company's main focus is exploration for tin, in alluvial deposits and in bedrock.

The northern portion is underlain by Silurian Mathinna Beds, and the southern portion mostly underlain by phases of the Devonian tin-bearing granites of the Blue Tier Batholith.

Exploration work by Tin Dragon consisted of compilation of earlier company exploration, mining activities, and government surveys. This data was reviewed to determine the distribution and nature of known mineral deposits, to compile past production and estimates of remaining known resources, and to assess the prospectivity of the areas for untested or undiscovered alluvial tin and basement tin mineralisation.

To help target basement tin mineralisation prior stream sediment geochemical data and geophysical datasets such as airmagnetics, and gravity surveys were reviewed, but no targets were generated in the relinquished portions.

No field work was undertaken in the relinquished portions.

KEYWORDS

NE Tasmania
Geology
Mineralisation
Alluvial
Paleochannel
Leads
Primary Deposits
Granite
Mathinna Group
Tin

SUMMARY OF ACTIVITIES for Relinquished portions of EL31/2011 Great Musselroe River for the Period from grant to 4 December 2013

A compilation of

- previous company exploration and mining activities, and any previous relevant investigations by for example MRT (none found in the relinquished areas),
- all past geochemical exploration survey data
- geophysical datasets such as airmagnetics, radiometrics, and gravity surveys.
- Satellite/airborne remote sensing datasets such as Aster and Landsat.

This data was then reviewed to assess the prospectivity of the areas for untested or undiscovered alluvial tin and for basement tin mineralisation.

No field work has been undertaken in the relinquished sectors.

CO-ORDINATES

All lat/long co-ordinates in this report refer to the GDA94 Datum, unless stated otherwise.

All AMG co-ordinates in this report refer to the GDA94 - Zone55, unless stated otherwise.

FILE SUMMARY LIST

File name	Format	Contents
EL312011_2013_relinquishment_report.pdf	pdf	Relinquishment Report

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- 2.0 Geological setting and mineralisation
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1.0 INTRODUCTION

This report describes the exploration activities completed within the two relinquished portions of EL11/2008 from grant in 2008 until 15 December 2013. Two portions of EL11/2008 still remain, and are not subject to this report.

The Tenement is located generally north, east, and south of Gladstone, which is a small mining town located 140 km east of Launceston, in north-east Tasmania, Fig.1.

Table 1 – Tenement Details

Tenement	Holder	Date Granted	Original Size	Relinquished area
EL31/2011 Great Musselroe River	Tin Dragon Pty Ltd 100%	2011 (Categories 1 and 5)	190 km ²	136 km ²

The project lies within the Tasmania NE (SK55-21) 1:250,000 map sheet, and the 1:25,000 map sheets of Gladstone, Lanka, Spurrs Rivulet, Derby and Pioneer. Access is via a sealed major road between Gladstone and Pioneer. Formed local roads and logging tracks and other rough tracks provide access within the project area.

The retained parts of the tenement cover a number of past producer alluvial tin mines and many known alluvial tin deposits, but there are very few known basement tin deposits. Past production of cassiterite is about 3,100 tonnes, and unmined resources calculated by various authors total about 1,400 tonnes.

The company's main focus is exploration for tin, in alluvial deposits and in bedrock.

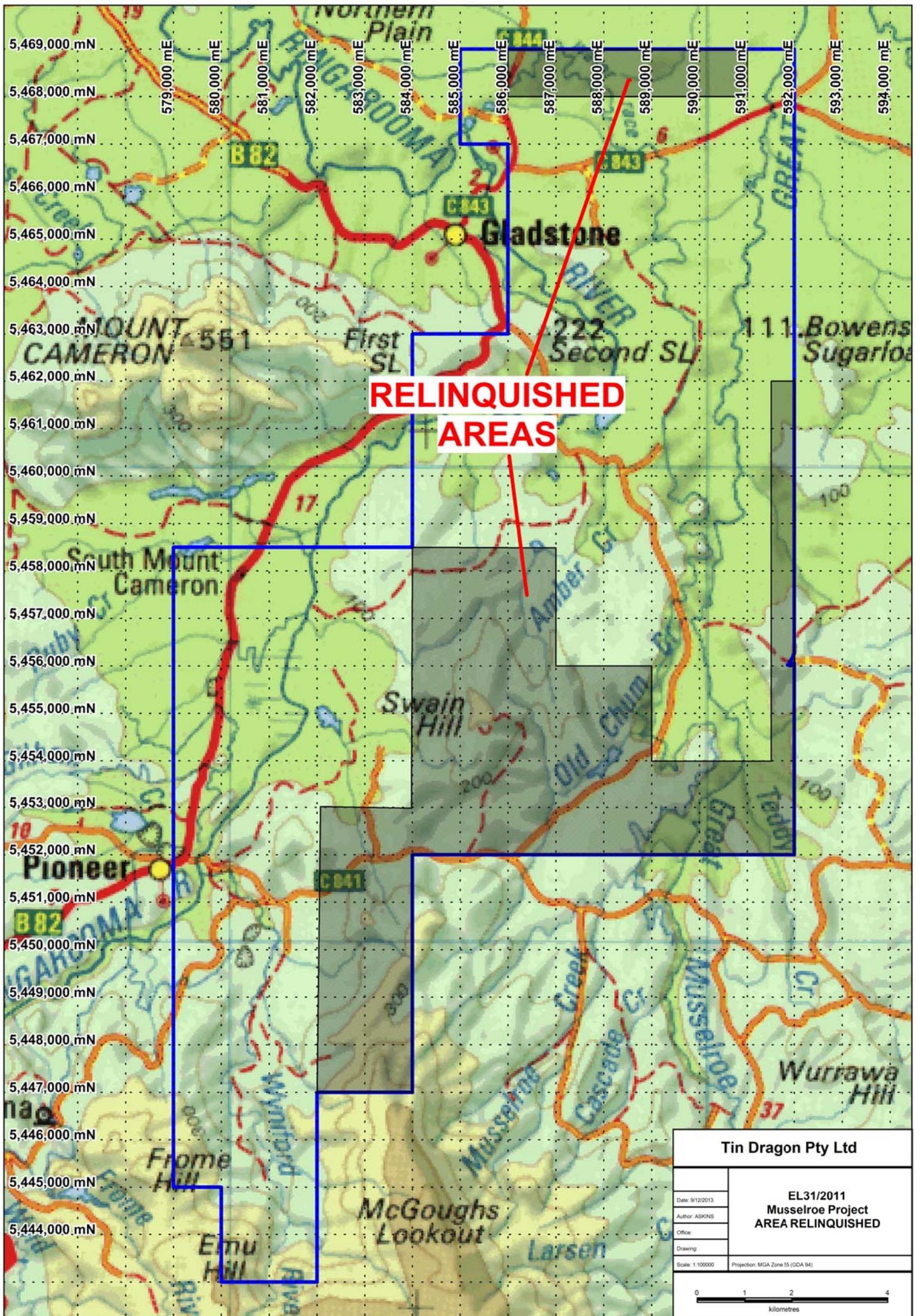


FIG 1

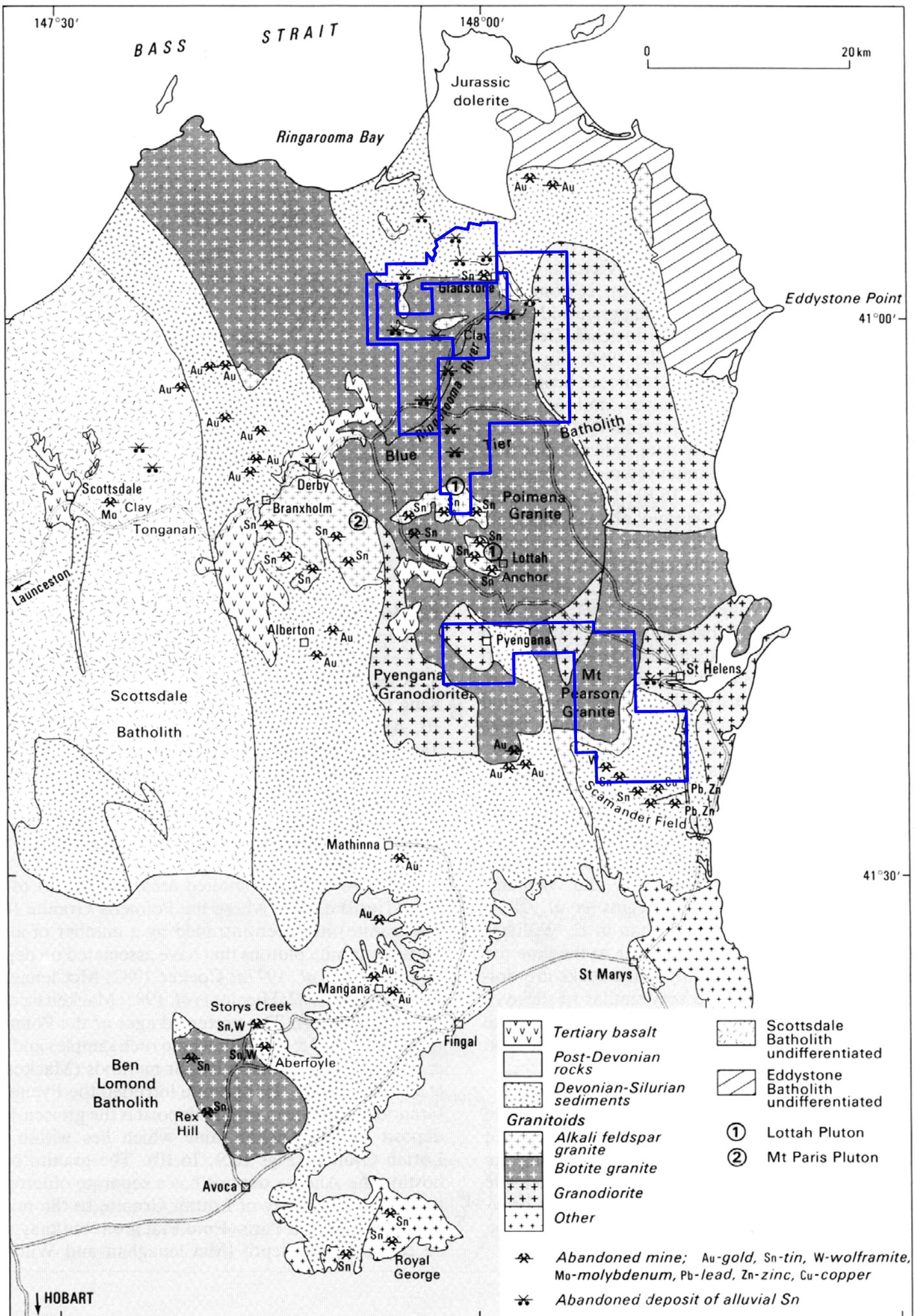


FIG 2 29/A/22

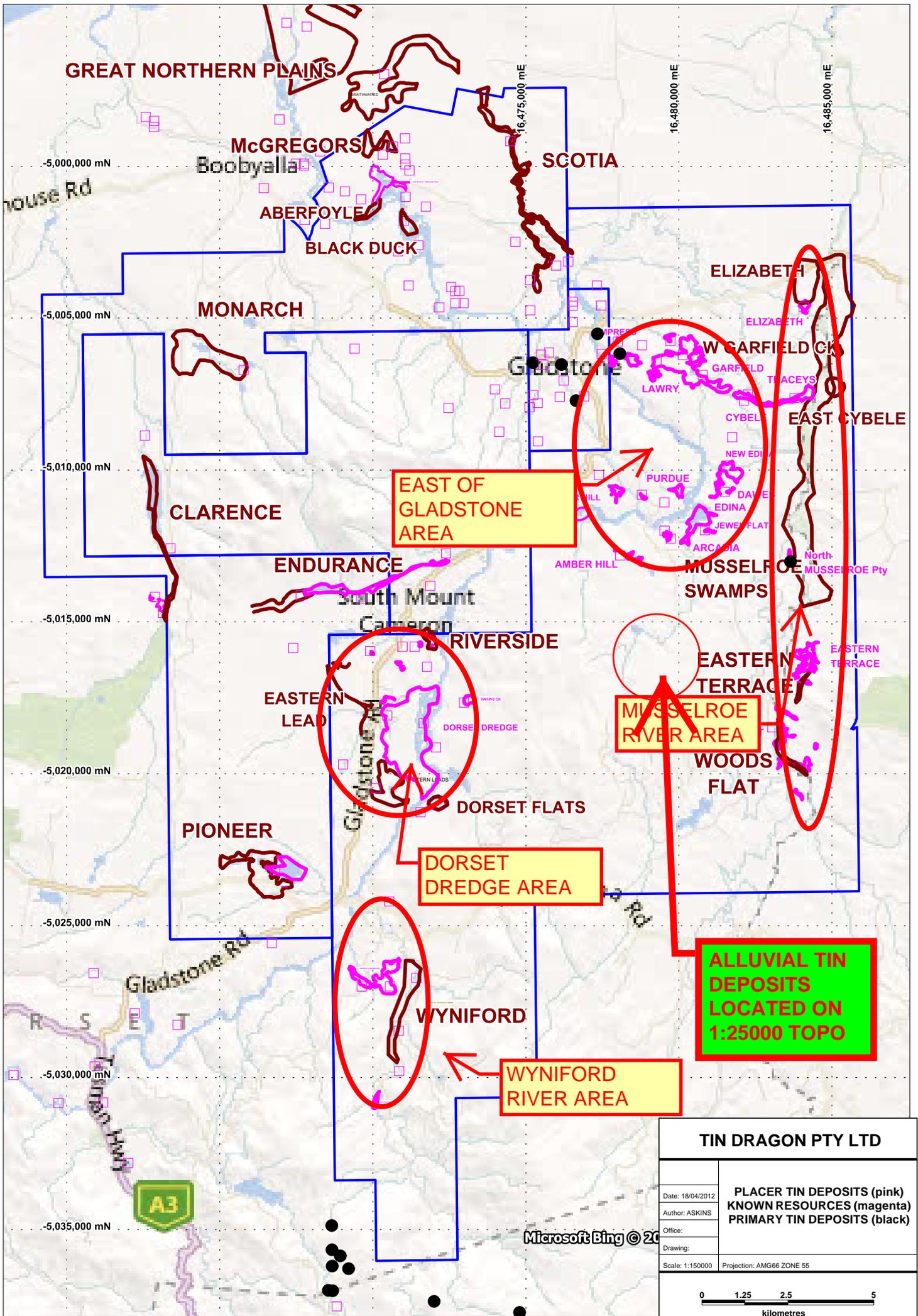


FIG 3

2.0 GEOLOGICAL SETTING and MINERALISATION

The northern sector is underlain by Silurian Mathinna Beds, and the southern sector mostly phases of the Devonian tin-bearing granites of the Blue Tier Batholith, whose solid geology is shown on Fig 2.

There is no known mineralisation in the relinquished areas, whereas the retained areas contain many alluvial tin deposits, as shown on Fig 3.

3.0 REVIEW OF PREVIOUS WORK

No exploration work by companies or by government on specific targets in the relinquished areas is reported in MRT records.

Given the proximity to known tin resources it is likely that prospectors have tested all drainages in the area for tin content, but presumably nothing has been found. There are no recorded workings.

4.0 EXPLORATION COMPLETED DURING THE REPORT PERIOD

Exploration work by Tin Dragon during the period from grant to 4 December 2013 consisted of compilation of

- previous company exploration and mining activities, and any previous relevant investigations by for example MRT (none found in the relinquished areas),
- all past geochemical exploration survey data
- geophysical datasets such as airmagnetics, radiometrics, and gravity surveys.
- Satellite/airborne remote sensing datasets such as Aster and Landsat.

This data was then reviewed to assess the prospectivity of the areas for untested or undiscovered alluvial tin and for basement tin mineralisation.

No field work has been undertaken in the relinquished sectors.

5.0 REVIEW OF PROSPECTIVITY

Prospectivity for alluvial tin deposits

In the relinquished sectors no alluvial deposits, whether mined or not, are known from MRT records nor evident on satellite and Google Earth imagery, and thus the sectors are assessed as having low prospectivity.

Prospectivity for basement tin deposits

Stream sediment geochemical data from past explorers was reviewed. All data was obtained from the MRT database and processed. Samples which have been analysed for tin and for tungsten are almost entirely absent, so no geochemically anomalous zones are generated, as shown on Figs 4 and 5.

Date:

Author: ASKINS

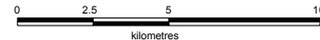
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Scale: 1:250000

Projection: AMG Zone 55 (AGD 66)

**Distribution of
STREAM SEDIMENT SAMPLES
where analysed for
TIN**



**TIN, ppm
STREAM SEDIMENTS**

-  1,000 to 200,000 (1094)
-  500 to 1,000 (593)
-  100 to 500 (2139)
-  0 to 100 (17578)
-  -1,000 to 0 (10775)

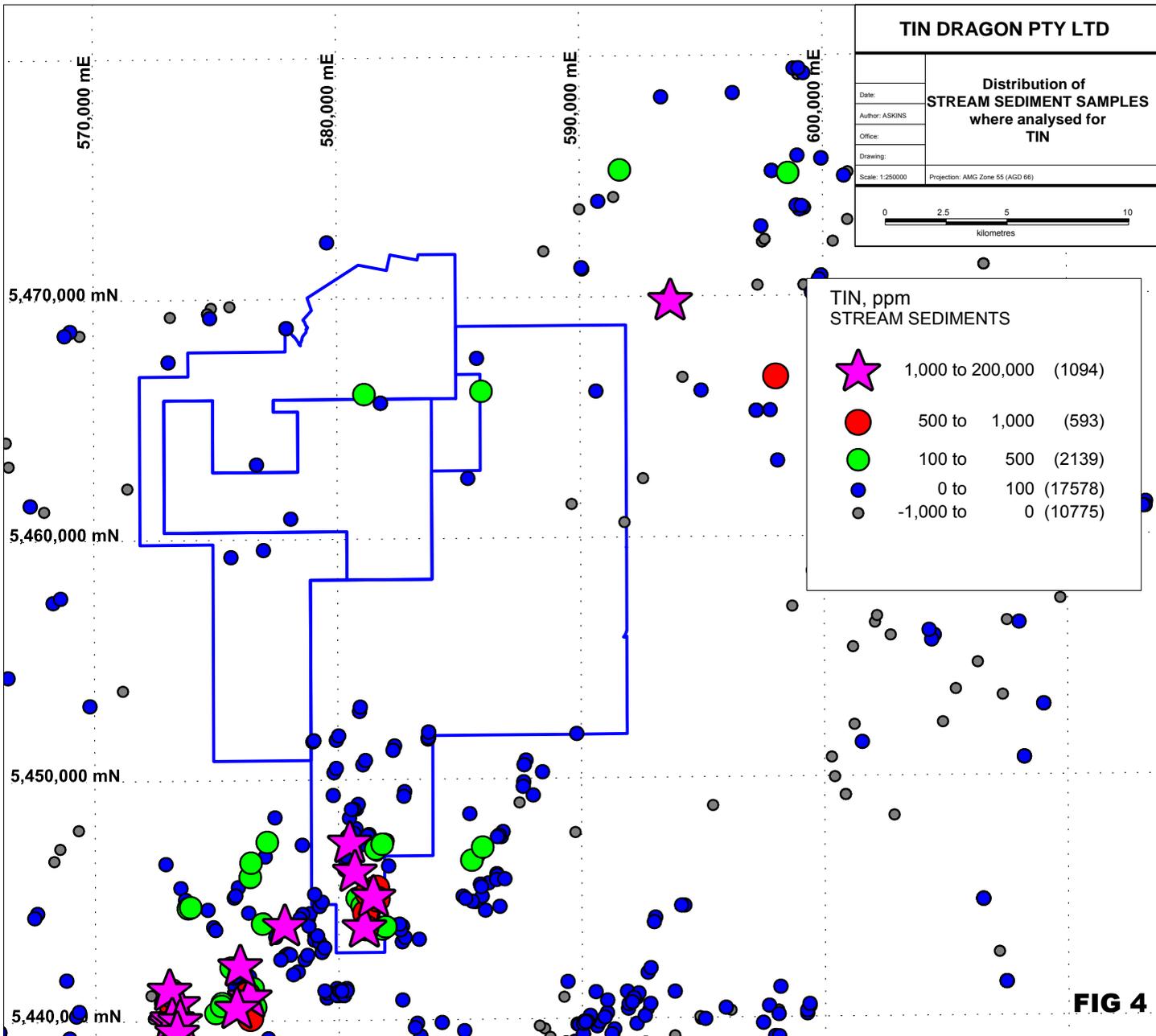


FIG 4

TIN DRAGON PTY LTD

Distribution of STREAM SEDIMENT SAMPLES where analysed for TUNGSTEN

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Author: ASKINS
Office:
Drawing:

Scale: 1:250000 Projection: AMG Zone 55 (AGD 66)



TUNGSTEN, ppm STREAM SEDIMENTS

-  100 to 2,150 (26)
-  50 to 100 (113)
-  20 to 50 (350)
-  0 to 20 (564)
-  0 to 0 (1301)

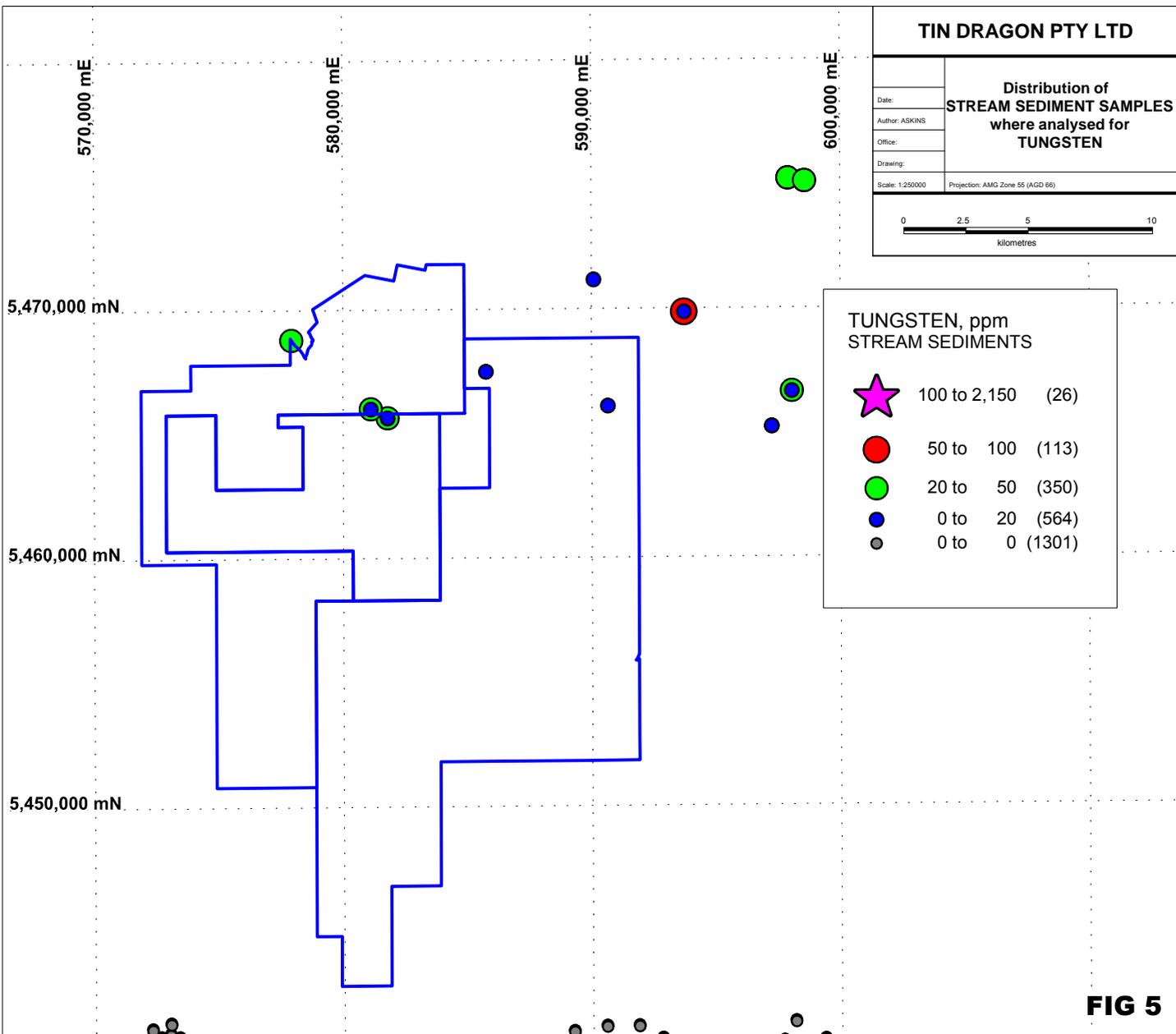


FIG 5

In an attempt to target regionally the location of basement mineralisation a study was made of gravity data and regional airmagnetics.

Gravity

Regional and local gravity data was assembled and studied. A regional residual gravity and contour plot is shown as Fig 6. In the north of the Tenement outside the relinquished sector there is a strong gradient corresponding to known alluvial tin mineralisation.

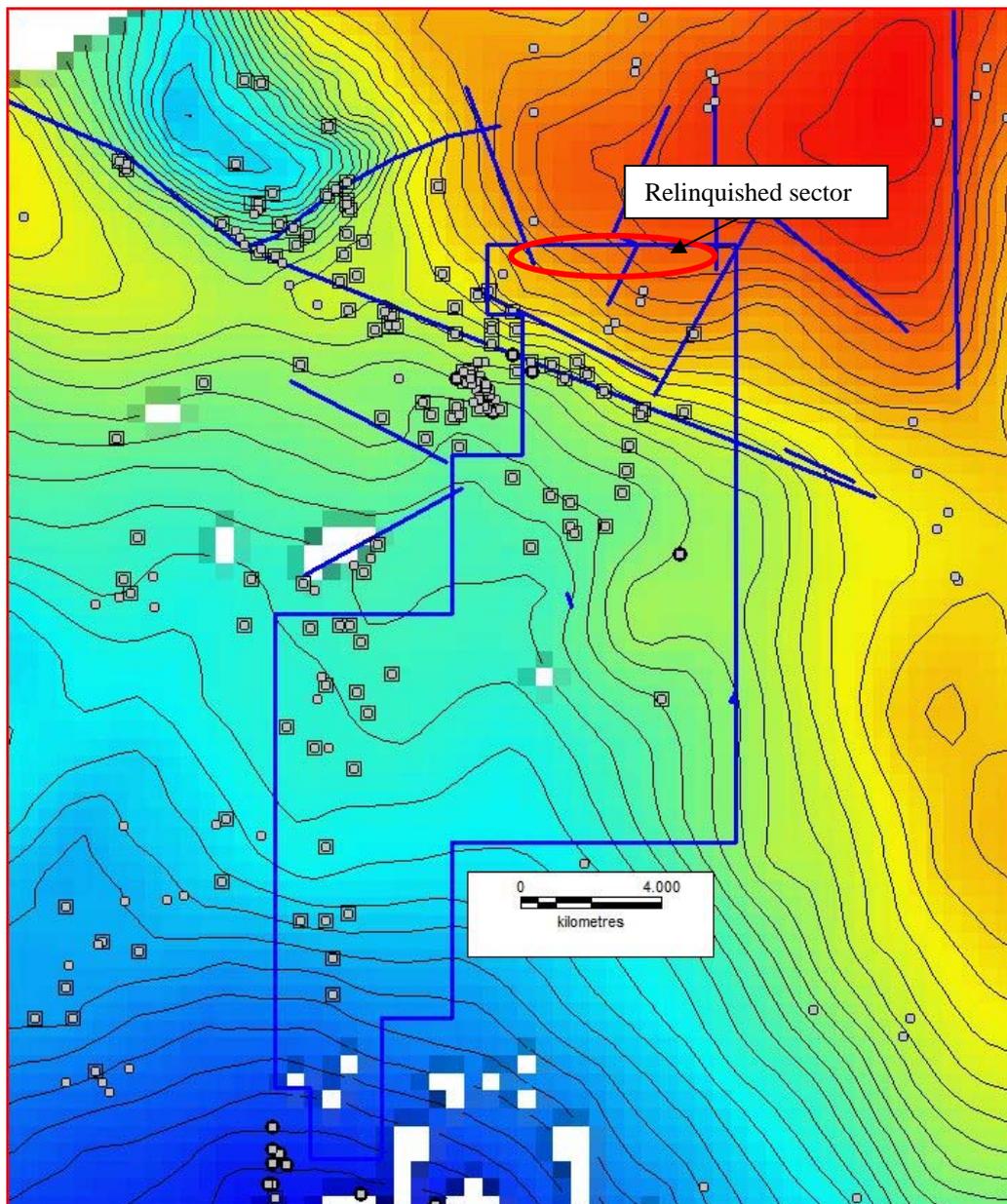


Fig 6. Contoured Residual Gravity image showing interpreted faults and their correlation with known alluvial tin deposits (squares).

The PhD Thesis of M Roach (1994) was examined because he had studied the controls on gold mineralisation in the same area. He collected detailed gravity data, and processed it to produce a model of thickness of Mathinna Beds; part of his model diagram is shown on Fig 7. The strong gradients reflect fault-bound grabens. If these faults pre-date the emplacement of the Devonian granite below, they can be expected to be a locus for mineralisation, and so are potentially mineralised zones, however no known mineralisation is present in the relinquished sector.

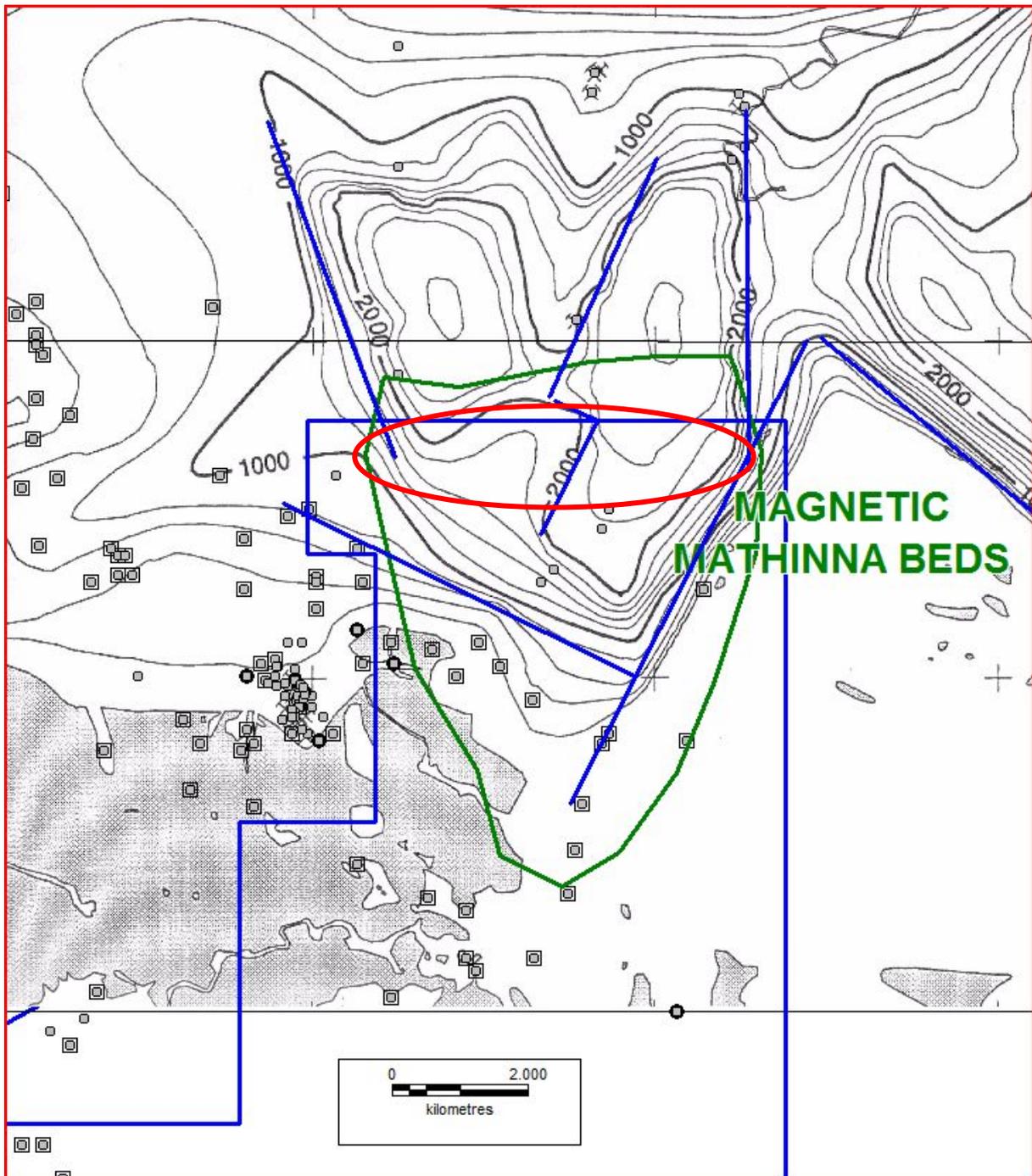


Fig 7. Modelled Mathinna Bed Thickness in metres, demonstrating fault control, and general correlation with mineralisation.

Magnetics

At the Great Pyramid deposit in the Scamander area it is known that the tin mineralisation hosted in Mathinna Bed quartzites has associated magnetite alteration, so magnetics has been used there as a targeting tool.

In the northern part of the Tenement a suite of magnetic Mathinna beds occurs, Fig 8. The magnetic units are extensive and likely to be primary features rather than be caused by secondary magnetite bearing alteration. They show little direct correlation with known tin mineralisation, though being alluvial they could be displaced from a magnetic source.

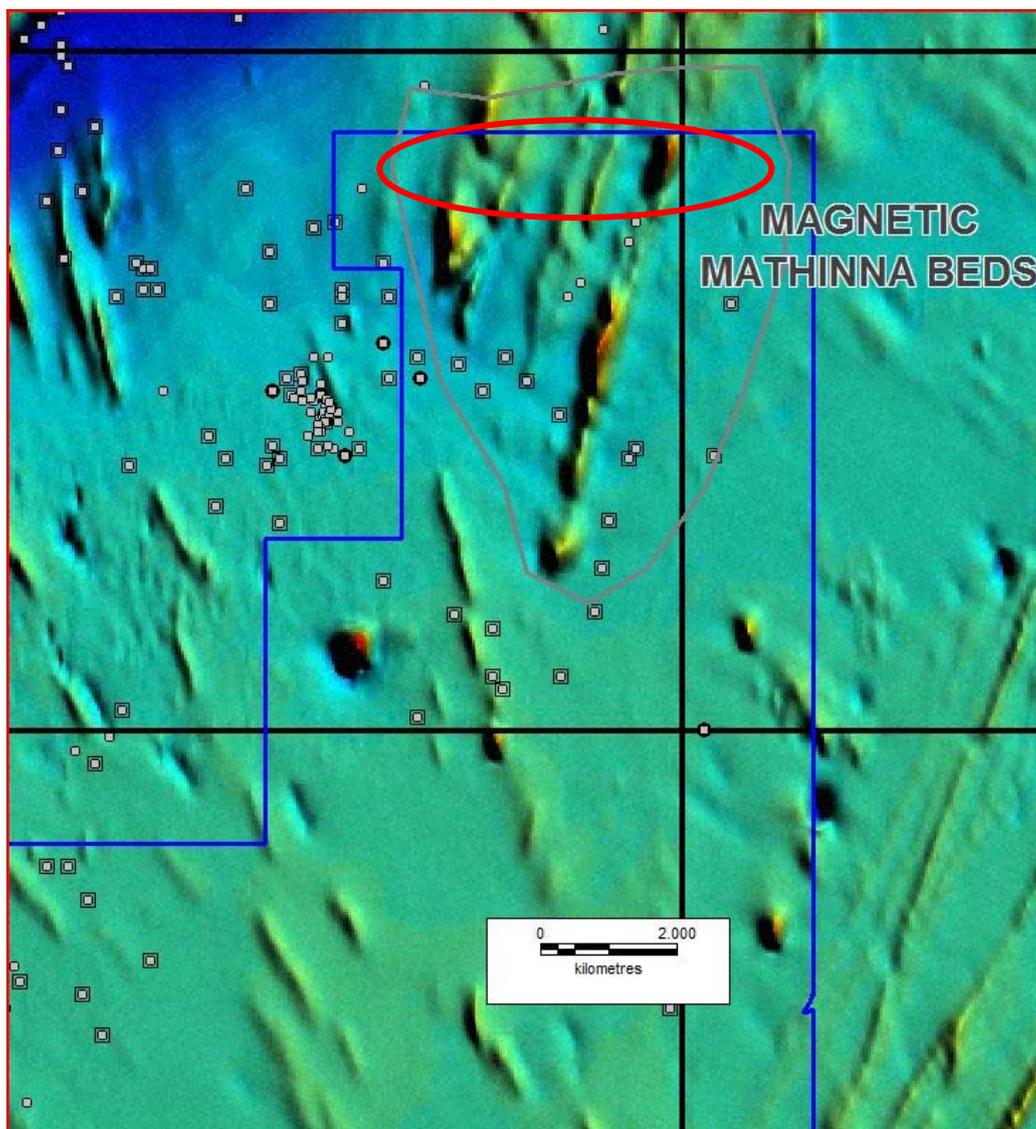


Fig 8. Known mineral deposits on TMI imagery.

Yim (1990, 1991) has pointed out that the coarse cassiterite present in alluvial deposits of the region must have a nearby source. Thus the best prospectivity for outcropping basement tin mineralisation is likely to be near known alluvial deposits. The relinquished sectors are judged to be relatively non-prospective because:-

1. In both sectors there are no recorded deposits,
2. In the southern sector the granite's apical roof zones, where sheeted veins and greisen systems could be prospective, have probably been eroded away.
3. If such large mineralised systems still exist then prospectors in this heavily mined region would have previously discovered them.

Apart from tin the region has prospectivity for clay, ion-adsorption rare earth deposits, gold, tungsten, tantalum, monazite, zircon, rutile, ilmenite, and other gemstones such as topaz and peridot. Generally these are to be expected in areas of known tin mineralisation, so the relinquished sectors are assessed to be non-prospective.

6.0 GENERAL CONCLUSIONS

The areas judged non-prospective for tin, (and other commodities), were relinquished from the Tenement.

7.0 EXPENDITURE

Expenditures have been reported via MRT Quarterly Returns.

8.0 REFERENCES

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