



STELLAR RESOURCES LIMITED

Tarcoola Iron Pty Ltd

## EL13/2020 (LILYDALE)

### **PARTIAL SURRENDER REPORT FOR THE PERIOD**

16 August 2021 – 15 January 2024 (Entire Term)

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## ABSTRACT

This Partial Surrender Report covers work completed on the 117 km<sup>2</sup> Surrendered Area of EL13/2020 surrendered on 15 January 2024 by Tarcoola Iron Pty Ltd (“Tarcoola”), a wholly owned subsidiary of Stellar Resources Limited, for the entire term the Surrendered Area has been held by Tarcoola from 16 August 2021 to 15 January 2024. The EL13/2020 Surrendered Area is located in the vicinity of Lilydale, NE Tasmania comprising of three blocks; (a) North of Lilydale, (b) St Patricks River area, and (c) North of Blessington.

On 10 October 2022, Mineral Resources Tasmania approved Tarcoola’s application to consolidate EL14/2020 into EL13/2020 following Partial Surrender of 134 km<sup>2</sup> for EL13/2020 and 191 km<sup>2</sup> of EL14/2020 approved on 5 September 2022. The 117 km<sup>2</sup> of EL13/2020 surrendered on 15 January 2024 includes areas previously held by Tarcoola under EL14/2020 prior to consolidation into EL13/2020 on 10 October 2022.

On 17 January 2024, Mineral Resources Tasmania approved Tarcoola’s application to consolidate EL13/2020 into EL16/2020. The 50 km<sup>2</sup> Retained Area of EL13/2020 is therefore now part of EL16/2020. Work completed on the 50 km<sup>2</sup> Retained Area is covered in separate Annual Reports and is not included in this report.

EL13/2020 is one of 5 Exploration Licences currently held by Tarcoola covering a combined area of 648 km<sup>2</sup> in NE Tasmania. Tarcoola is actively exploring for lithium, gold, tin, and base metals on the ground it holds in northeast Tasmania.

Regionally, North-east Tasmania is highly prospective for Victorian-style Orogenic Gold, Intrusive Related Gold Systems (IRGS) contains ~739 recorded historic gold occurrences. Included of note is the Beaconsfield Mine (2.3 MOz), Lefroy Goldfield (0.2MOz) and New Golden Gate Mine (0.3 MOz).

EL 13/2020 occupies a structurally complex region between Lisle and Lefroy goldfields, with targets identified because of their numerous Au-bearing mineral occurrences, position along major regional structures, and nearby anomalous historic stream sediment results.

Work completed on the EL13/2020 Surrendered Area during the entire term the ground has been held from 16 August 2021 to 15 January 2024 has included:

- Reprocessing of geophysical surveys (aeromagnetic, radiometric and gravity surveys).
- Creation of historic exploration database and GIS environment.
- Capture of historic surface geochemistry data not in MRT Database from historic annual reports.
- Desktop targeting studies which identified the following targets within the EL13/2020 Surrendered Area:
  - Lower Turners Marsh Au Target (AOI\_008) - 3 Au-bearing mineral occurrences and associated 0.32 ppm Au reported from a stream sediment sample. Significant NNW striking fault, with which a series of NW striking splays.
  - North Lilydale Au Target (AOI\_009) - Au mineral occurrences, subtle NE magnetic lineament, limited surface geochemistry.
  - Elverton Au Target (AOI\_13) – Doughnut shaped magnetic feature which occurs at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.

Reconnaissance visits and surface geochemistry:

- Lower Turners Marsh Au Target (AOI\_008) - 1 rock chip sample collected during a reconnaissance visit in Feb 2022 returned no significant gold result and only mildly anomalous pathfinder element results (0.35ppm Ag, 16ppm As).
- North Lilydale Au Target (AOI\_009) - No field work has been undertaken on the target which has been surrendered without being tested.
- Elverton Au Target (AOI\_13): 1 stream sediment sample collected in Sept 22 to the south of the Elverton Au Target on the Surrendered Area returned no significant results. The sample was collected

as part of a minor reconnaissance stream sediment sampling program over the Elverton Au Target over the retained area of EL13/2020.

Tarcoola conducted a review of its NE Tasmania exploration projects in November 2023 which resulted in the priority of the targets within the Surrendered Area being downgraded and a decision being made to surrender the area to reduce costs.

Expenditure was not separately recorded for the Surrendered Area. Expenditure over the Retained and Surrendered Areas combined has been reported in previous Annual Reports.

**CONTENTS**

ABSTRACT .....2

1 INTRODUCTION .....6

    1.1 Exploration Rationale .....6

        1.1.1 Regional .....6

        1.1.2 Prospect .....6

    1.2 Exploration Licence – EL13/2020 Surrendered Area .....8

        1.2.1 Exploration Licence Summary - EL13/2020 Surrendered Area .....8

2 REVIEW OF PREVIOUS WORK ..... 10

    2.1 Historic Summary ..... 10

3 EXPLORATION COMPLETED DURING REPORTING PERIOD..... 11

    3.1 Reprocessing of Geophysical surveys ..... 11

    3.2 Creation of Historic Exploration Database and GIS Environment ..... 11

    3.3 Capture of Historic Surface Geochemistry not in MRT Database ..... 11

    3.4 Desktop Targeting Studies..... 11

    3.5 Reconnaissance Visits and Surface Geochemistry ..... 12

        3.5.1 Lower Turners Marsh Au Target (AOI\_008)..... 12

        3.5.2 North Lilydale Au Target (AOI\_009)..... 12

        3.5.3 Elverton Au Target (AOI\_13):..... 12

4 DISCUSSION OF RESULTS ..... 15

    4.1 Lower Turners Marsh Au Target (AOI\_008) ..... 15

    4.2 North Lilydale Au Target (AOI\_009) ..... 15

    4.3 Elverton Au Target (AOI\_13): ..... 15

5 CONCLUSIONS ..... 15

6 FUTURE EXPLORATION ..... 15

7 ENVIRONMENTAL MANAGEMENT ..... 15

8 EXPENDITURE ..... 15

9 REPORTING BIBLIOGRAPHY ..... 16

10 REFERENCES ..... 16

APPENDICES..... 17

**List of Tables**

Table 1. Historic Exploration Summary ..... 10

Table 2. EL13/2020 List of Reports Provided During Exploration Tenement Term..... 16

**List of Figures**

Figure 1. Activities Summary Map - EL13/2020 Surrendered Area (16 August 2021 to 15 January 2024).....5

Figure 2. EL13/2020 Surrendered and Retained Areas .....9

Figure 3. Lower Turners Marsh Au Target Rock Chip Results..... 13

Figure 4. Stream Sediment Sample Results South of Elverton Au Target – Surrendered Area ..... 14

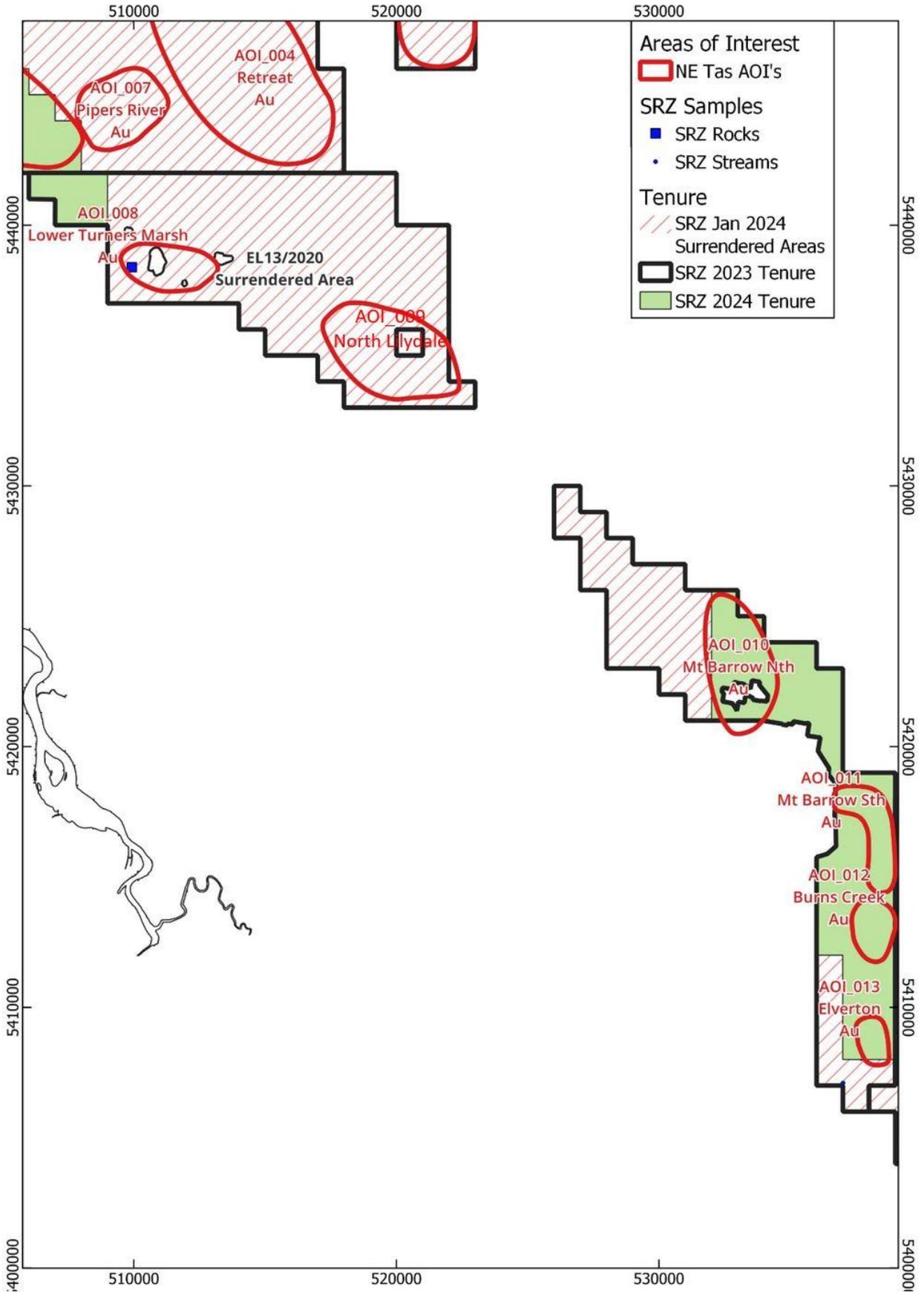


Figure 1. Activities Summary Map - EL13/2020 Surrendered Area (16 August 2021 to 15 January 2024)

# 1 INTRODUCTION

## 1.1 Exploration Rationale

### 1.1.1 Regional

NE Tasmania is considered an extension of the Western Lachlan Fold Belt, which hosts the 4Moz Walhalla gold mine in central Victoria (Figure 2). NE Tasmania hosts the Beaconsfield Mine (2.3 MOz), the Lefroy Goldfield (0.2MOz), and New Golden Gate Mine (0.3 MOz), as well as an additional >700 gold-bearing hard-rock mineral occurrences (Figure 3). NE Tasmania is considered prospective for orogenic and intrusion-related gold.

Orogenic gold mineralisation typically occurs within quartz veins which occupy 2nd or 3rd order dilational zones along large-scale faults related to folding and deformation. Typically, the orientation of these veins west of Pipers River tends to be east-west, which contrasts with that east of Pipers River, which tends to be NW. Both are interpreted to reflect dilation along sinistral transpressional structural corridors, oriented NW and NNW, respectively. Intrusive Related Gold occurs as veins and in stockworks at the margins of gold-bearing granodiorite stocks and plutons.

The two major mineralisation styles Orogenic gold, and Intrusion Related Gold Systems are typically identified by distinctive geophysical characteristics and associated mineral assemblages determined by the different geological settings. Regional scale structural trends/lineaments identified in aeromagnetic and gravity surveys and corresponding mapped faults have been interpreted as targets for orogenic gold mineralisation, whereas IRGS mineralisation is typically targeted using magnetic highs (or lows) associated with margins of granodiorites, interpreted as reflecting magnetite alteration and hornfelsing of the Mathinna group sediments, or strong mag-destructive sericite alteration.

### 1.1.2 Prospect

EL 13/2020 occupies a structurally complex region between Lisle and Lefroy goldfields, with targets identified because of their numerous Au-bearing mineral occurrences, position along major regional structures, and nearby anomalous historic stream sediment results.

At the regional scale, the widespread curvi-linear magnetic features both within the Mathinna metasedimentary rocks and the Diddlieum Plains Granodiorite are considered to reflect the hornfelsing and/or possible hydrothermal alteration of the country rocks, or magnetite associated with late-stage fractionated I-type intrusions within the granodiorite, respectively. On this basis, the NE and eastern parts of the tenement are considered prospective for gold mineralisation spanning the orogenic to intrusion-related spectrum.

#### 1.1.2.1 Lower Turners Marsh Au Target (AOI\_008)

Selected because of the 3 Au-bearing mineral occurrences and associated 0.32 g/t Au reported from a stream sediment sample. Structurally, this area is characterised by a significant NNW striking fault, with which a series of NW striking splays are associated. Since these faults are mapped as offsetting the post-mineral Parmeener rocks, it's likely that the last movement of these structures was west-down normal faulting associated with the opening of the Midland Graben during the Tertiary. However, they also parallel the regional fabric of the metasedimentary rocks, suggesting that any Tertiary normal faulting was probably reactivating early NW striking structures developed in the Benambran or Tabberabberan orogenic events associated with gold mineralisation in NE Tasmania.

#### 1.1.2.2 North Lilydale Au Target (AOI\_009)

Selected for similar reasons to the Lower Turners Marsh Au target. Within the North Lilydale Au target, a series of Au-bearing mineral occurrences are visible, although more sparsely distributed than in the Lower Turners Marsh Au target. Within the same broad district, are 2 stream sediment anomalies >0.1 g/t Au. Structurally, this area too is complex. The North Lilydale Au target is located at the termination of (or at least a major change in strike of) a significant NW striking structure that is mapped for approximately 20km but continues

as a lineament visible in aeromagnetic and topographic data for 75km SW toward Mangana. This continuity of strike implicates this structural zone as a crustal scale feature and major fluid pathway during orogenesis.

**1.1.2.3 Everton Au Target (AOI\_013)**

Selected for a doughnut shaped magnetic feature which occurs at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.

## 1.2 Exploration Licence – EL13/2020 Surrendered Area

EL13/2020 was granted to Tarcoola Iron Pty Ltd (“Tarcoola”), a wholly owned subsidiary of Stellar Resources Limited, on 16 August 2021.

On 15 January 2024, Mineral Resources Tasmania approved Tarcoola’s Partial Surrender application to surrender 117 km<sup>2</sup> of EL13/2020, with 50 km<sup>2</sup> retained (see Figure 2).

This Partial Surrender Report for EL13/2020, covers work completed on the 117 km<sup>2</sup> Surrendered Area for the entire term the Surrendered Area has been held by Tarcoola (16 August 2021 to 15 January 2024).

On 10 October 2022, Mineral Resources Tasmania approved Tarcoola’s application to consolidate EL14/2020 into EL13/2020 following Partial Surrender of 134 km<sup>2</sup> for EL13/2020 and 191 km<sup>2</sup> of EL14/2020 approved on 5 September 2022. The 117 km<sup>2</sup> of EL13/2020 surrendered on 15 January 2024 includes areas previously held by Tarcoola under EL14/2020 prior to their consolidation into EL13/2020 on 10 October 2022.

On 17 January 2024, Mineral Resources Tasmania approved Tarcoola’s application to consolidate EL13/2020 into EL16/2020. The 50 km<sup>2</sup> Retained Area of EL13/2020 is therefore now part of EL16/2020. Work completed on the 50 km<sup>2</sup> Retained Area is covered in separate Annual Reports and is not included in this report.

EL13/2020 is one of 5 Exploration Licences currently held by Tarcoola Iron Pty Ltd, a 100% owned subsidiary of Stellar Resources Limited, covering a combined area of 648 km<sup>2</sup> in NE Tasmania. Tarcoola is actively exploring for lithium, gold, tin, and base metals on the ground it holds in northeast Tasmania.

### 1.2.1 Exploration Licence Summary - EL13/2020 Surrendered Area

Tenement number: EL13/2020 Surrendered Area

Tenement name: LILYDALE

Tenement area: 117 km<sup>2</sup> Surrendered Area

Tenement location: The Surrendered Area is located in the vicinity of Lilydale, NE Tasmania comprising of three blocks; (a) North of Lilydale, (b) St Patricks River area, and (c) North of Blessington.

Reporting period: 16 August 2021 to 15 January 2024.

Tenement holder: Tarcoola Iron Pty Ltd., a wholly owned subsidiary of Stellar Resources Limited.

Department of State Growth  
MINERAL RESOURCES TASMANIA

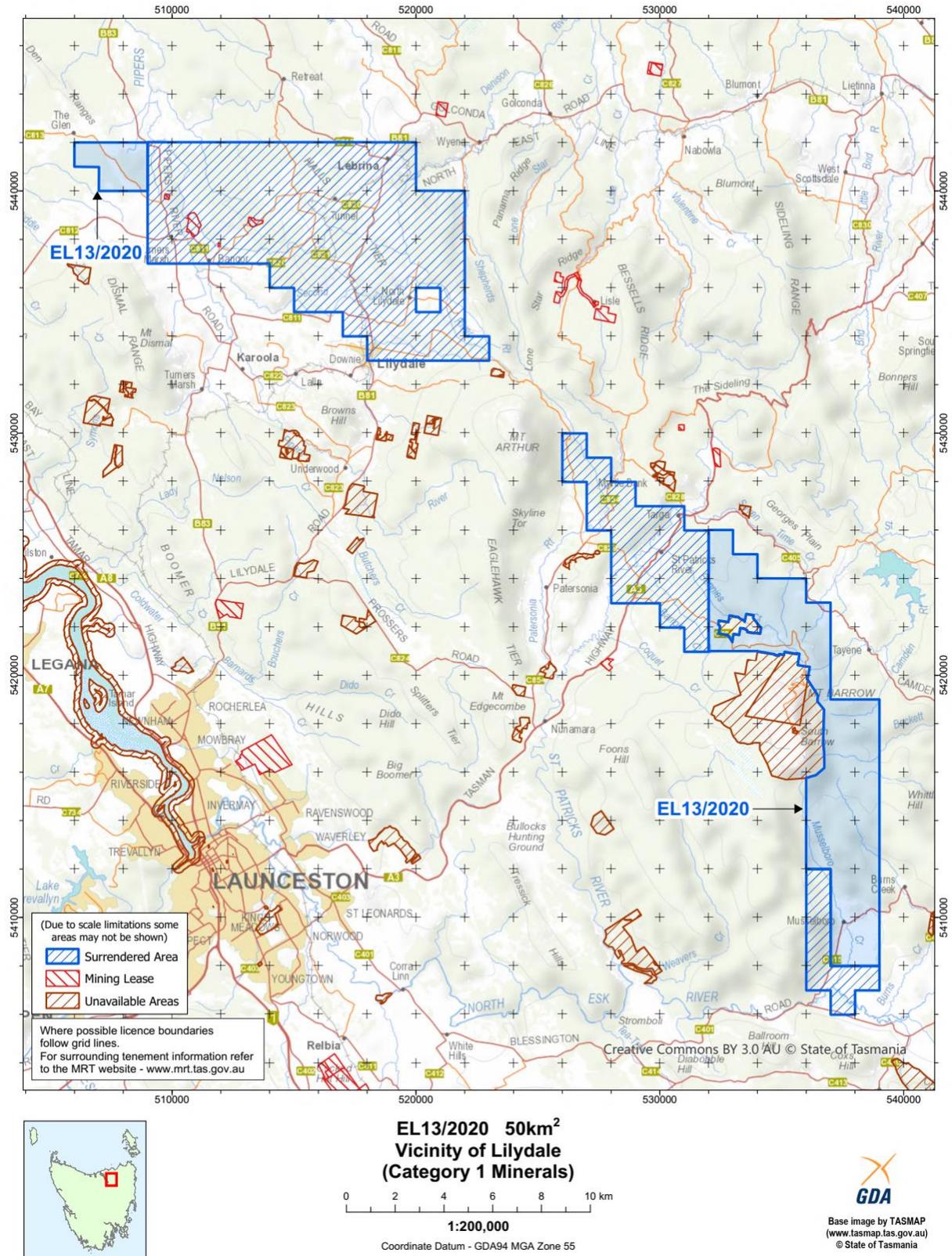


Figure 2. EL13/2020 Surrendered and Retained Areas

## 2 REVIEW OF PREVIOUS WORK

### 2.1 Historic Summary

A review of historic work completed on EL13/2020 (Surrendered and Retained Areas) was compiled by Adrian Rigg is listed in Table 1.

*Table 1. Historic Exploration Summary*

<b>EL13/2020 Lilydale and Nunamara</b>					
<b>Company</b>	<b>Year</b>	<b>Location</b>	<b>Activity</b>	<b>Comments</b>	<b>Report</b>
Billiton	1989	Regional	Rock chip sampling	Ag, As, Au, Ba, Bi, Cu, Pb, Sb, Sn, W, Zn	92-3337
TGS	1993	Pipers River	Aeromagnetic survey	200m fls	
MRT	1999	Nth Tasmania	Aeromagnetic survey	200m fls	
MRT	2007	NE Tasmania	Aeromagnetic survey	200m fls	

### 3 EXPLORATION COMPLETED DURING REPORTING PERIOD

This section covers work completed by Tarcoola Iron Pty Ltd., a wholly owned subsidiary of Stellar Resources Limited, on the EL13/2020 Surrendered Area (117 km<sup>2</sup>) during the entire term the ground has been held from 16 August 2021 to 15 January 2024.

#### 3.1 Reprocessing of Geophysical surveys

From November 2020 to January 2021 Phil Muir from Southern Mineral Exploration Geophysics completed reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron in the NE Tasmania (Appendix A). In addition to the 2007 Northeast Tasmania and 1999 Northern Tasmania regional aeromagnetic and radiometric surveys, 6 local aeromagnetic surveys over Tarcoola Iron's NE Tasmania tenements were reprocessed using 5 different filterers on aeromagnetic surveys, 5 different filters on airborne radiometric surveys and 2 different filters on gravity surveys. For each survey and filter combination, 4 different colouring options were produced resulting in a total of 362 different reprocessed geophysical images generated (See **Appendix A**). Local surveys were also stitched into regional surveys to produce combined regional-local survey stitched images.

The reprocessed geophysical surveys produced by Southern Mineral Exploration Geophysics have provided a key targeting tool for desktop identification of orogenic structural gold targets and IRGS targets.

#### 3.2 Creation of Historic Exploration Database and GIS Environment

In October 2020, Ross Corben from Geowiz Consulting compiled Tarcoola Iron's initial exploration database in Microsoft Access, containing all available historic exploration data including:

- Soil sampling results
- Stream sediment sampling results
- Rock chip results
- Drilling results
- Historic records on occurrences

Geowiz then established a GIS environment in Google Earth incorporating all the data in the historic exploration Microsoft Access database, along with the reprocessed geophysical surveys completed by Southern Mineral Exploration Geophysics and published 25K and 50K geological map sheets.

#### 3.3 Capture of Historic Surface Geochemistry not in MRT Database

From February 2021 to March 2022, GIS consultant Adrian Rigg captured soil sampling, stream sediment sampling and rock chip sampling data not available in MRT's database for Tarcoola's NE Tasmania EL's from public file Company annual exploration reports. These have been added to the Access database and GIS environments by Geowiz.

A total of zero rock chip samples, 3 stream sediment samples and zero soil samples were captured from company reports within the EL13/2020 Surrendered Area. This data is provided in **Appendix B**.

#### 3.4 Desktop Targeting Studies

Several desktop targeting studies have been completed by Stellar and by consultant Josh Phillips from JP Geoscience. These have comprised review of all historic data including soil, rock chip and stream sediment results, drilling results and historic records on occurrences within each tenement as well as analysis of geophysical surveys completed by Phil Muir.

Targets identified within the EL13/2020 Surrendered Area are shown in Figure 1 and include:

- Lower Turners Marsh Au Target (AOI\_008) - 3 Au-bearing mineral occurrences and associated 0.32 ppm Au reported from a stream sediment sample. Significant NNW striking fault, with which a series of NW striking splays.
- North Lilydale Au Target (AOI\_009) - Au mineral occurrences, subtle NE magnetic lineament, limited surface geochemistry.
- Elverton Au Target (AOI\_13) – Doughnut shaped magnetic feature which occurs at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.

### 3.5 Reconnaissance Visits and Surface Geochemistry

#### 3.5.1 Lower Turners Marsh Au Target (AOI\_008)

One rock chip sample collected over the Lower Turners Marsh Au target during a reconnaissance visit in Feb 2022 returned no significant gold result and only mildly anomalous pathfinder element results (0.35ppm Ag, 16ppm As).

Results from the 1 rock chip sample collected over the Lower Turners Marsh Au target within the Surrendered Area are included in the MS Access database provided in **Appendix C** and shown in Figure 3.

All samples were all located by handheld GPS.

Samples were taken to ALS Burnie for sample preparation including coarse crushing and pulverisation.

Analysis methods used by ALS for rocks comprised:

- Au was analysed using a 30g charge for fire assay (Au-AA23).
- Four acid digestion with ICP-MS finish (MEMS61) for all other elements.

#### 3.5.2 North Lilydale Au Target (AOI\_009)

No field work has been undertaken on the target which has been surrendered without being tested.

#### 3.5.3 Elverton Au Target (AOI\_13):

One stream sediment sample collected in Sept 22 to the south of the Elverton Au Target returned no significant results. The sample was collected as part of a minor reconnaissance stream sediment sampling program over the Elverton Au Target over the retained area of EL13/2020.

Results from the 1 stream sediment sample collected to the south of the Elverton Au Target within the Surrendered Area are included in the MS Access database provided in **Appendix C** and shown in Figure 4.

All samples were all located by handheld GPS.

Stream sediment samples were sieved to -80 mesh in the field and taken to ALS Burnie for analysis by Aqua Regia – ICP (AuME-TL43)

- [Josh confirm AA23 deletion?].

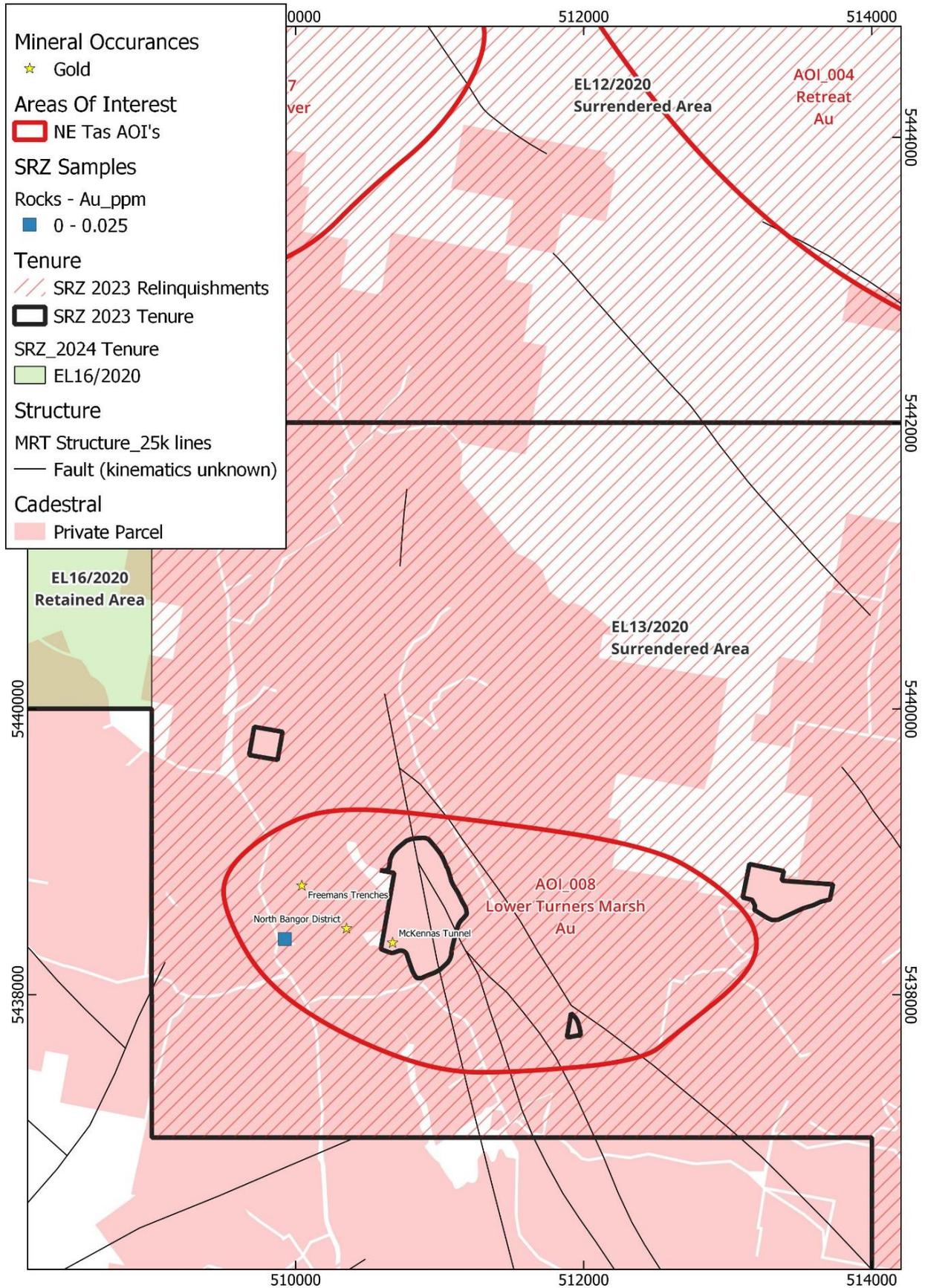


Figure 3. Lower Turners Marsh Au Target Rock Chip Results

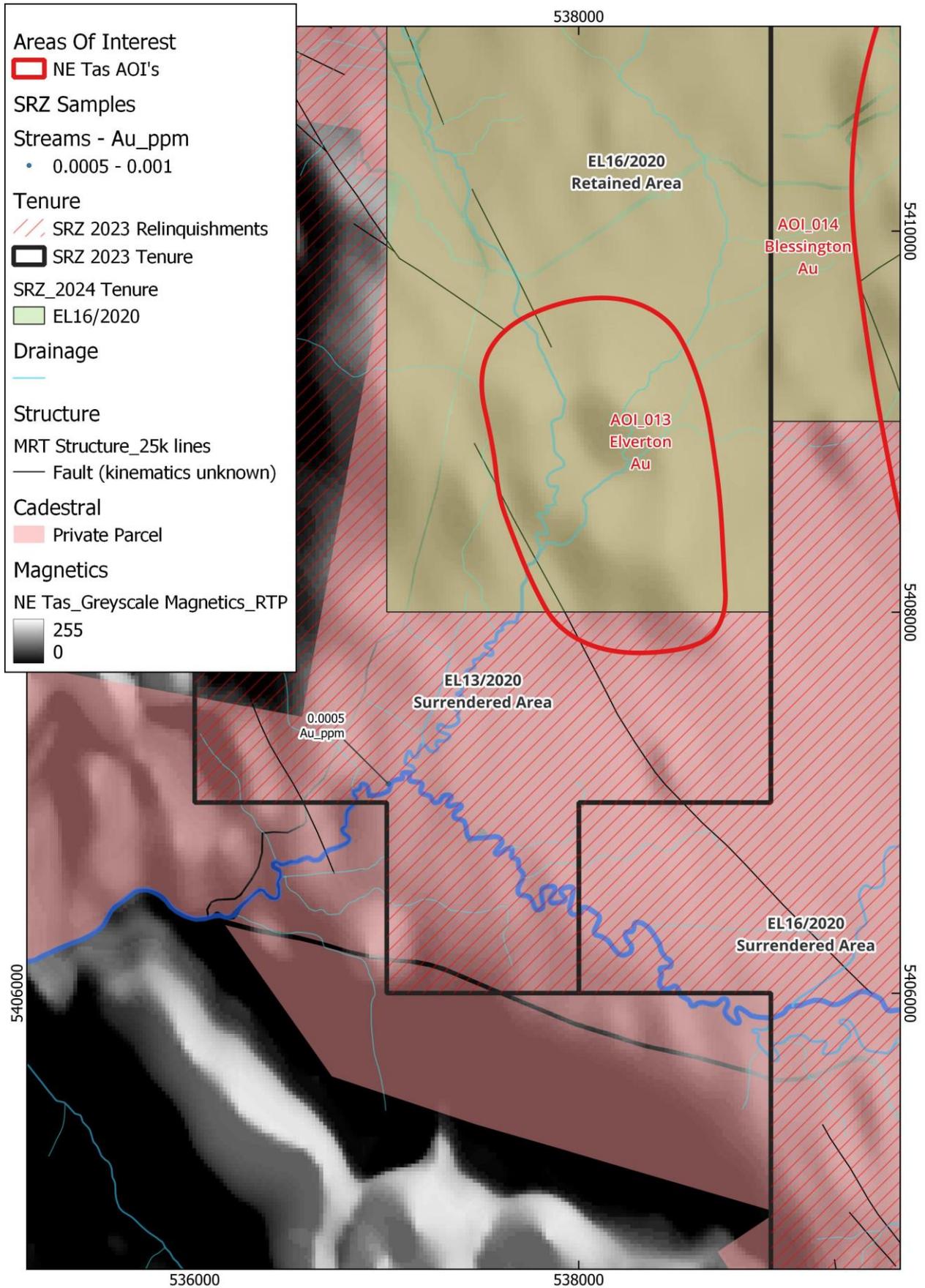


Figure 4. Stream Sediment Sample Results South of Elverton Au Target – Surrendered Area

## **4 DISCUSSION OF RESULTS**

### **4.1 Lower Turners Marsh Au Target (AOI\_008)**

Only one rock chip sample was collected over the Lower Turners Marsh Au target during a reconnaissance visit in Feb 2022 which returned no significant gold result and only mildly anomalous pathfinder element results (0.35ppm Ag, 16ppm As). The target remains largely untested.

### **4.2 North Lilydale Au Target (AOI\_009)**

No field work has been undertaken on the target which has been surrendered without being tested.

### **4.3 Elverton Au Target (AOI\_13):**

The Elverton Au target is primarily within the retained area of EL13/2020. The one stream sediment sample taken within the surrendered area returning no significant results was located south of the target.

## **5 CONCLUSIONS**

Tarcoola conducted a review of its NE Tasmania exploration projects in NE Tasmania in November 2023 which resulted in the priority of the targets within the Surrendered Area being downgraded and a decision being made to surrender the area to reduce costs.

## **6 FUTURE EXPLORATION**

As the area has been surrendered, no further work is planned.

## **7 ENVIRONMENTAL MANAGEMENT**

Minor vegetation cutting for foot access to sample sites has been the only environmental disturbances occurring from exploration activities such as geological mapping and hand sample collection. All and any disturbance is remediated immediately when samples are taken, in accordance with best practice. For example, all soil sampling holes are backfilled with a suitable length stick included, in case of subsidence, so the smaller fauna can always climb out. Disturbed rocks are replaced to preserve insect and reptile habitat.

## **8 EXPENDITURE**

Expenditure was not separately recorded for the Surrendered Area. Expenditure over the Retained and Surrendered Areas combined has been reported in previous Annual Reports.

## 9 REPORTING BIBLIOGRAPHY

Annual Technical Reports as provided during the term Tarcoola Iron Pty Ltd have held EL13/2020 is detailed in Table 2 below.

*Table 2. EL13/2020 List of Reports Provided During Exploration Tenement Term*

COMPANY	PERIOD	TITLE	AUTHOR	APPENIDCES
Tarcoola Iron Pty Ltd (Stellar Resources Limited)	16 August 2021 to 15 August 2022	EL14_2020 2022 Annual Technical Report	R. Lockley, J. Phillips	Appendix A - Reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (P. Muir)  Appendix B - Historic Geochemistry database - Access database  Appendix C – Magnetic Inversions EL14/2020 (Mitre Geophysics)
	16 August 2021 to 15 August 2022	EL13_2020 2022 Annual Technical Report	R. Lockley, J. Phillips	Appendix A - Reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (P. Muir)  Appendix B - Historic Geochemistry database - Access database
	16 August 2022 to 15 August 2023	EL13_2020_2023 Annual Technical Report	R. Lockley, J. Phillips	Appendix A - EL13_2020 Tarcoola Iron Geochemical data - Access database

## 10 REFERENCES

See Table 1 for MRT references to Annual Reports covering historic exploration completed over EL13/2020. All historic listings are referenced by Company, Year, Location, and the relevant Report Number.

Bottril, R.S., Taheri, J., Keele, R.A., and McClenaghan. 1994, A field guide to gold deposits in northeastern Tasmania, Mineral Resources Tasmania REPORT 1994/149

Reed, A.R., 2004, Gold mineralisation and the regional Palaeozoic structure of the Mathinna Supergroup, eastern Tasmania, Mineral Resources Tasmania REPORT 2004/01

Seymour, D.B., Woolward, I.R., McClenaghan, M.P., Bottril, R.S. 2011, Stratigraphic revision and re-mapping of the Mathinna Supergroup between the River Tamar and the Scottsdale Batholith, northeast Tasmania, Mineral Resources Tasmania, Tasmania.

## APPENDICES

- Appendix A    Reprocessed aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (Phil Muir, Southern Mineral Exploration Geophysics, Nov 2020 – Jan 2021)
- Appendix B    Historic Geochemical data captured from company reports over Surrendered Areas collected by GIS consultant Adrian Rigg. Microsoft Access database. (Ross Corben, Geowiz Consulting)
- Appendix C    Surface Geochemistry Results – samples collected by Tarcoola. Microsoft Access database. (Ross Corben, Geowiz Consulting)