



STELLAR RESOURCES LIMITED

Tarcoola Iron Pty Ltd

## EL 16/2020 CAMDEN ROAD



### PARTIAL SURRENDER REPORT FOR THE PERIOD

16 August 2021 – 20 September 2024

Compiled by: Gary Fietz

DATE: 24 September 2024

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**ABSTRACT**

This Partial Surrender Report for EL 16/2020 Camden Road, covers work completed on the 93 km<sup>2</sup> surrendered area of EL 16/2020 surrendered on 20 September 2024 by Tarcoola Iron Pty Ltd (“Tarcoola”), a wholly owned subsidiary of Stellar Resources Limited. The report covers the entire term the EL 16/2020 Surrendered Area (93 km<sup>2</sup>) has been held by Tarcoola from 16 August 2021 to 20 September 2024.

The EL 16/2020 Surrendered Area (93 km<sup>2</sup>) comprises of three separate blocks; a small northern block located approximately 8km south of Pipers River, a central block located immediately to the north and east of the Mount Barrow Reserve, and a southern block located in the vicinity of the rural locality of Upper Blessington.

On 17 January 2024, Tarcoola’s application to consolidate EL 16/2020 and EL 13/2020 (a prior consolidation of former EL 14/2020 and EL 13/2020) into EL 16/2020 was approved by MRT. EL 16/2020, EL 13/2020 and EL 14/2020 were all granted to Tarcoola on 16 August 2021 with EL 16/2020 initially covering an area of 248 km<sup>2</sup>, EL 13/2020 initially covering an area of 242 km<sup>2</sup> and EL 14/2020 initially covering an area of 247 km<sup>2</sup>. On 5 September 2022, partial surrender applications by Tarcoola were approved for surrender of 134 km<sup>2</sup> from EL 13/2020 and 188 km<sup>2</sup> from EL 14/2020. On 10 October 2022, Tarcoola’s application to consolidate the retained areas of EL 13/2020 and EL 14/2020 into EL 13/2020 was approved by MRT with the consolidated EL 13/2020 having an area of 167 km<sup>2</sup>. In January 2024, further partial surrender applications by Tarcoola were approved for surrenders of 109 km<sup>2</sup> from EL 16/2020 and 117 km<sup>2</sup> from EL 13/2020, with 139 km<sup>2</sup> retained from EL 16/2020 and 50 km<sup>2</sup> retained from EL 13/2020. Following the consolidation of EL 16/2020 and EL 13/2020 into EL 16/2020 approved on 17 January 2024, EL 16/2020 had an area of 189 km<sup>2</sup>. On 20 September 2024, Tarcoola’s application was approved for a further partial surrender of 93 km<sup>2</sup> of EL 16/2020, with an area of 96 km<sup>2</sup> of EL 16/2020 now retained.

EL 16/2020 is one of 5 Exploration Licences currently held by Tarcoola, now covering a combined area of 337 km<sup>2</sup> in NE Tasmania. Tarcoola is actively exploring for lithium, gold, tin, base metals and critical minerals on the ground it holds in NE Tasmania.

Regionally the North-east Tasmania area is prospective for Victorian-style Orogenic Gold, and Intrusive Related Gold Systems (IRGS) with ~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).

Work completed by Tarcoola on the EL 16/2020 Surrendered Area during the entire term the ground has been held from 16 August 2021 to 20 September 2024 has included:

- Reprocessing of geophysical surveys (aeromagnetic, radiometric and gravity).
- 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 EL 16/2020 Surrendered Area:
  - **Mt Barrow Nth AOI (Au)** - located immediately to the north of the Mount Barrow Reserve and selected for a zone of anomalously high magnetics in an area of Mathinna Supergroup Sediments, interpreted to reflect the Diddleum Plains granodiorite and associated hornfelsing of Mathinna group sediments at depth. In addition, this area contains mapped thrust faults, possible fold closures, and 3 anomalous historic stream sediment samples that return 0.08, 0.16 and 0.25 g/t Au.
  - **Elverton AOI (Au)** – located approximately 6km north of the rural township of Blessington and selected for a doughnut shaped magnetic feature, occurring at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.
  - **Upper Blessington AOI (Au)** – located immediately to the west of the rural township of Upper Blessington, a large target selected due to its magnetic signature in an area of complex folding/faulting, potential structural offset fault intersections, old workings and associated historic Au stream sediments up to 0.15 ppm Au and historic rock chip samples up to 1.3% Au.

- **Ben Lomond AOI (Au)** – located immediately to the northeast of the Ben Lomond National Park and selected for its anomalous magnetic high over a region of granodiorite contacting Mathinna sandstone under a ferruginous gravel and ironstone Cenozoic cover.
- Surface geochemistry programs completed:
  - **Mt Barrow Nth AOI (Au)** - 1 reconnaissance rock chip sample collected to the east of the Mt Barrow North AOI (Au) in July 2022 within the EL 16/2020 Surrendered Area as part of a reconnaissance program in the area with no significant results returned.
  - **Elverton AOI (Au)** – 1 reconnaissance rock chip sample and 3 reconnaissance stream sediment samples collected over the Elverton AOI (Au) in December 2021 and September 2022 respectively as part of a reconnaissance programs in the area with no significant results returned.
  - **Upper Blessington AOI (Au)** – reconnaissance rock chip sampling program of 9 samples and reconnaissance stream sediment sampling program of 9 samples collected over the Upper Blessington AOI (Au) in Dec 2021 and July 2022 respectively. These programs returned no significant results other than one slightly anomalous rock chip result of 0.014ppm Au taken from the granodiorite margin. These results failed to validate anomalous historic rock chip and stream sediment Au results downgrading the Upper Blessington Au target. Strongly anomalous gold results were however returned to the north the Upper Blessington Au target, over the Camden Road Au target within the Retained Area of EL 16/2020 and not covered in this report.
- Magnetic inversion modelling was undertaken by Mitre Geophysics for Tarcoola in 2022 over the Elverton and Ben Lomond targets.

Tarcoola conducted a review of its NE Tasmania exploration projects in August 2024 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 holding costs. Much of the gold potential within the EL 16/2020 Surrendered Area remains untested.

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

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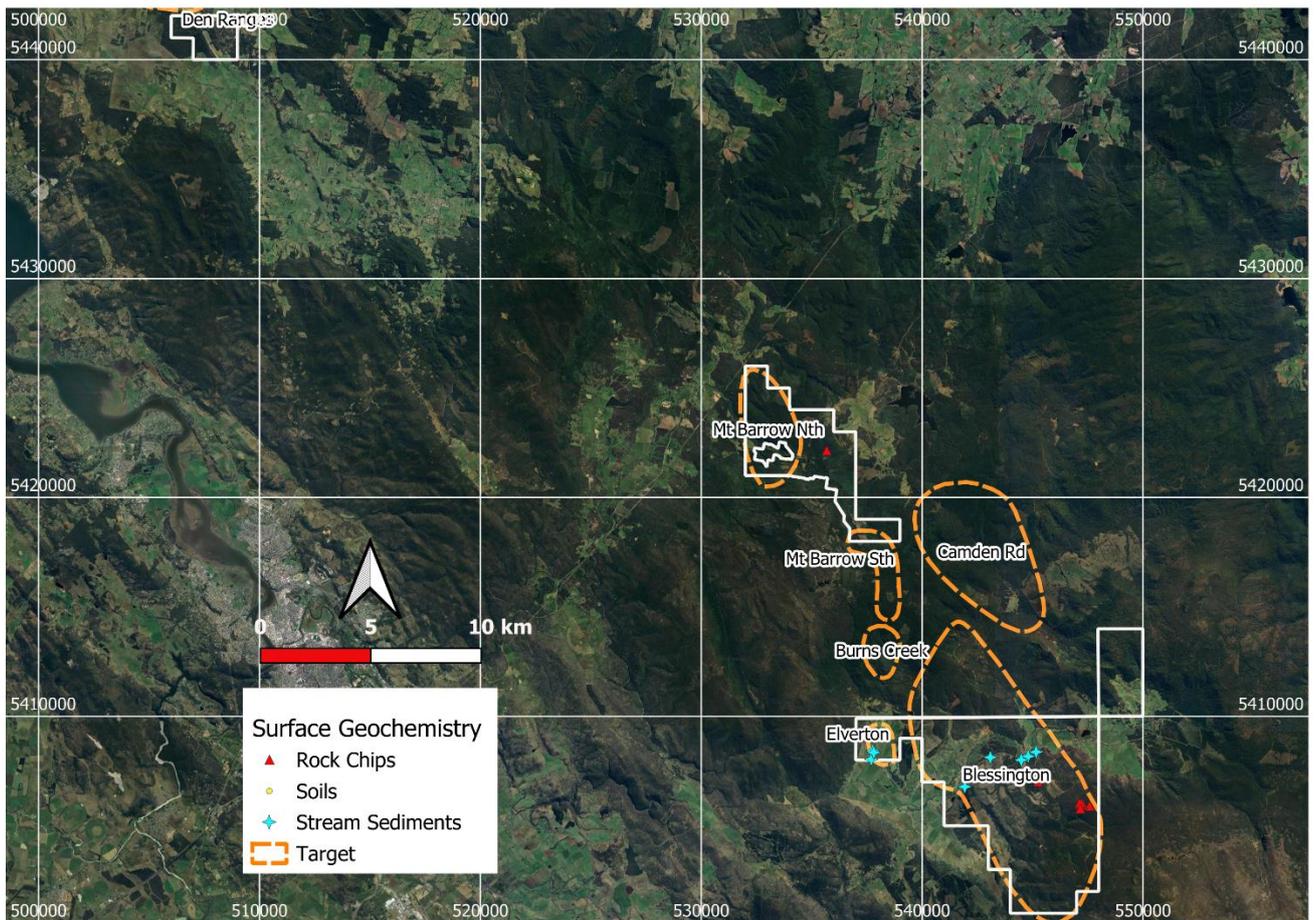


Figure 1. Activities Summary Map EL 16/2020 Surrendered Area, Entire Term (16 Aug 2021 to 23 Aug 2024)

## **1 INTRODUCTION**

### **1.1 Exploration Rationale**

#### **1.1.1 Geological Setting**

NE Tasmania is considered an extension of the Western Lachlan Fold Belt, which hosts the 4Moz Walhalla gold mine in central Victoria. 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. NE Tasmania is considered highly prospective for orogenic and intrusion-related gold. While Victoria has experienced intense gold exploration activity, NE Tasmania has had very little modern gold exploration undertaken.

Regionally, NE Tasmania comprises Ordovician to Devonian turbiditic sediments of the Mathinna Super-Group, which have been variably deformed and later intruded by dioritic – granitic plutons of mid-Devonian age. The regional structure suggests episodic orogenesis resulting in early recumbent folding developed in the early Tippoogorree Group west of Pipers River during the Benambran, and two subsequent phases of upright folding of Tabberabberan age in the Panama Group east of Pipers River (Reed 2004).

#### **1.1.2 Mineralisation**

Orogenic gold mineralisation 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.

#### **1.1.3 Structure**

The regional structure of NE Tasmania has been studied in detail and comprehensive reviews can be found in Reed (2004) and Seymour (2001). In brief, the regional NW strike of much of the Mathinna Supergroup reflects the NE and subsequent SW directed compressive events during the Benambran and Tabberabberan Orogenies. Rheological contrasts between sedimentary rock units resulted in dilational structures generally parallel to slightly oblique to the regional strike with mineralisation emplaced during major folding event. The shape and orientation of structures formed during earlier deformations has also influenced the orientations of reefs formed during D3 in the Alberton, Mathinna and Mangana goldfields, where sub-vertical bedding on the steep northeast limbs of upright D2 folds was in an orientation conducive to shear failure during D3 resulting in reefs striking predominantly northwest and parallel to regional fold trends (Reed 2004).

In contrast, Beaconsfield and the Lefroy goldfield are unique within southeast Australia where mineralised fault reefs strike in an easterly direction at a high angle to the predominantly northwest strike of bedding and folds. Lack of gold mineralisation along bedding planes, and pre D3 structures indicate reef formation resulting of a period of wrench faulting (Reed, 2004).

## 1.2 Prospect Geology

Gold prospects identified within the EL 16/2020 Surrendered Area include:

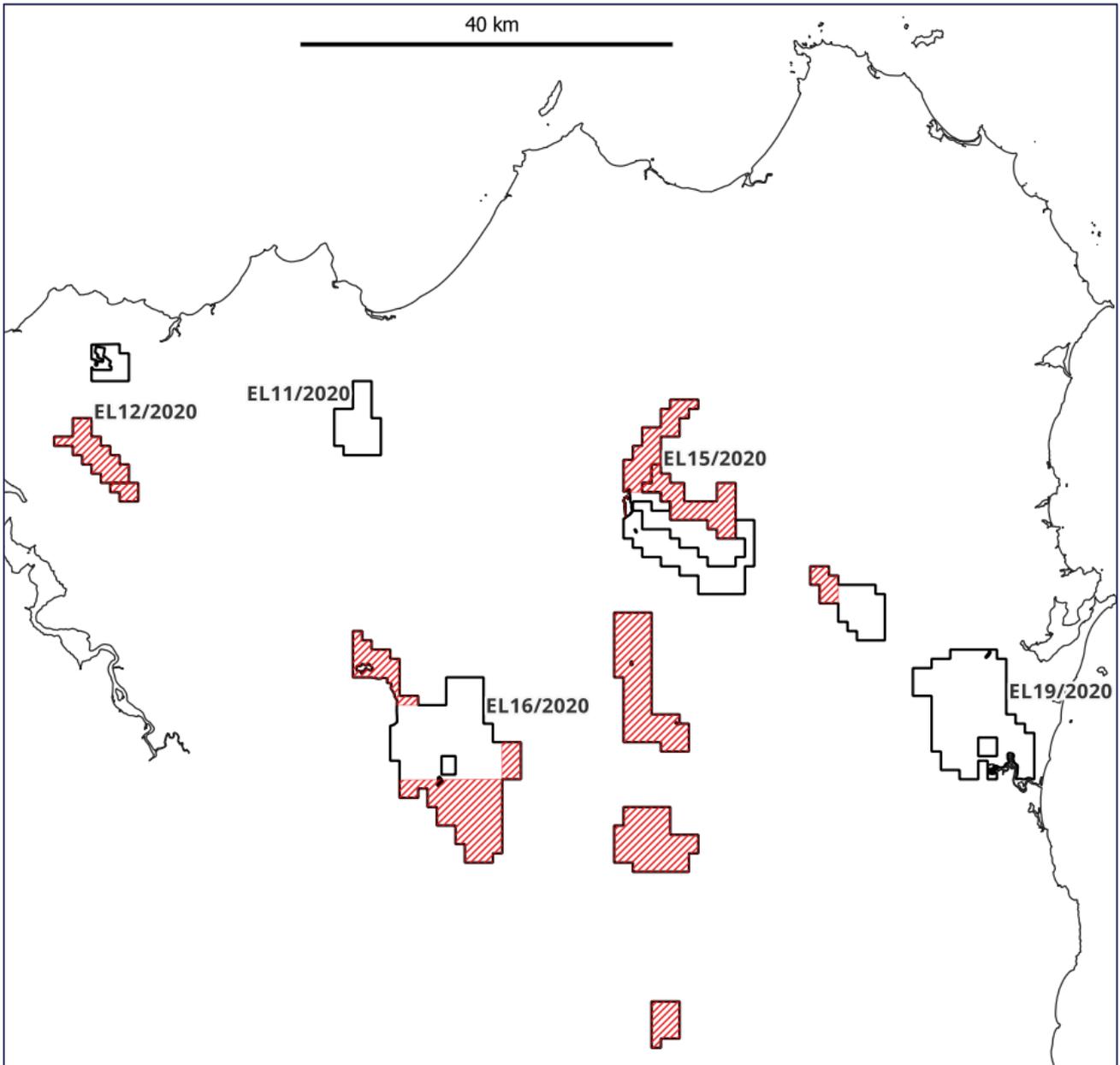
- **Mt Barrow Nth AOI (Au)** - located immediately to the north of the Mount Barrow Reserve and selected for a zone of anomalously high magnetics in an area of Mathinna Supergroup Sediments, interpreted to reflect the Diddleum Plains granodiorite and associated hornfelsing of Mathinna group sediments at depth. In addition, this area contains mapped thrust faults, possible fold closures, and 3 anomalous historic stream sediment samples that return 0.08, 0.16 and 0.25 g/t Au.
- **Elverton AOI (Au)** – located approximately 6km north of the rural township of Blessington and selected for a doughnut shaped magnetic feature, occurring at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.
- **Upper Blessington AOI (Au)** – located immediately to the west of the rural township of Upper Blessington, a large target selected due to its magnetic signature in an area of complex folding/faulting, potential structural offset fault intersections, old workings and associated historic Au stream sediments up to 0.15 ppm Au and historic rock chip samples up to 1.3% Au.
- **Ben Lomond AOI (Au)** – located immediately to the northeast of the Ben Lomond National Park and selected for its anomalous magnetic high over a region of granodiorite contacting Mathinna sandstone under a ferruginous gravel and ironstone Cenozoic cover.

## 2 LICENCE

### 2.1 Tarcoola’s Regional Exploration Licence Package

As a result of further prioritisation of targets within Tarcoola’s NE Tasmania tenement package undertaken in early-August 2024, partial surrender applications totalling 311 km<sup>2</sup> over 4 EL’s were made on 23 August 2024 as shown in Figure 2. These included an application to surrender an area of 93 km<sup>2</sup> of EL 16/2020 made on 23 August 2024, which was approved on 20 September 2024.

EL 16/2020 is one of 5 Exploration Licences currently held by Tarcoola, now covering a combined area of 337 km<sup>2</sup> in NE Tasmania. Tarcoola is actively exploring for lithium, gold, tin, base metals and critical minerals on the ground it holds in NE Tasmania.



*Figure 2. Tarcoola Partial Surrender Applications Approved 20 September 2024 (Red hatching – surrendered areas, white – retained areas)*

## 2.2 EL 16/2020 Partial Surrenders and Consolidations

On 17 January 2024, Tarcoola's application to consolidate EL 16/2020 and EL 13/2020 (a prior consolidation of former EL 14/2020 and EL 13/2020) into EL 16/2020 was approved by MRT. EL 16/2020, EL 13/2020 and EL 14/2020 were all granted to Tarcoola on 16 August 2021 with EL 16/2020 initially covering an area of 248 km<sup>2</sup>, EL 13/2020 initially covering an area of 242 km<sup>2</sup> and EL 14/2020 initially covering an area of 247 km<sup>2</sup>. On 5 September 2022, partial surrender applications by Tarcoola were approved for surrender of 134 km<sup>2</sup> from EL 13/2020 and 188 km<sup>2</sup> from EL 14/2020. On 10 October 2022, Tarcoola's application to consolidate the retained areas of EL 13/2020 and EL 14/2020 into EL 13/2020 was approved by MRT with the consolidated EL 13/2020 having an area of 167 km<sup>2</sup>. In January 2024, further partial surrender applications by Tarcoola were approved for surrenders of 109 km<sup>2</sup> from EL 16/2020 and 117 km<sup>2</sup> from EL 13/2020, with 139 km<sup>2</sup> retained from EL 16/2020 and 50 km<sup>2</sup> retained from EL 13/2020. Following the consolidation of EL 16/2020 and EL 13/2020 into EL 16/2020 approved on 17 January 2024, EL 16/2020 had an area of 189 km<sup>2</sup>.

On 20 September 2024, Tarcoola's application was approved for a further partial surrender of 93 km<sup>2</sup> of EL 16/2020, with an area of 96 km<sup>2</sup> of EL 16/2020 now retained.

This Partial Surrender Report for EL 16/2020, covers work completed on the 93 km<sup>2</sup> Surrendered Area for the entire term the Surrendered Area has been held by Tarcoola (16 August 2021 to 20 September 2024).

Readers are referred to Table 3 for a list of previous reports provided by Tarcoola over EL 16/2020.

### 2.3 Exploration Licence Summary

Tenement number:	EL 16/2020 Surrendered Area
Tenement name:	CAMDEN ROAD
Tenement area:	93 km <sup>2</sup> Surrendered Area
Tenement location:	The EL 16/2020 Surrendered Area comprises of 3 separate blocks; a small northern block located approximately 8km south of Pipers River, a central block located immediately to the north and east of the Mount Barrow Reserve, and a southern block located in the vicinity of the rural locality of Upper Blessington. Main road access is via; Glen Road to the northern block, Mount Barrow Road to the central block, and Blessington Road and Ben Lomond Road to the southern block. (see Figure 3).
Tenement land status:	Land tenure, as listed by the Department of State Growth (MRT), is listed as Private Land, Permanent Timber Production Zone Land, Potential Future Timber Production Land, and Informal Land (public land). Refer to Figure 4.
Tenement vegetation:	Vegetation, as listed by the Department of State Growth, is listed as Plantations for Silviculture, Agricultural land, Eucalyptus amygdalina forest and woodland, Eucalyptus obliqua dry, wet and over rainforest, Unverified plantation for silviculture, Urban unspecified, Button grass with shrub, Leptospermum, Wet heathland, Athrotaxis Cupressoides rainforest.
Reporting period:	16 August 2021 to 20 September 2024.
Tenement holder:	Tarcoola Iron Pty Ltd., a wholly owned subsidiary of Stellar Resources Ltd.

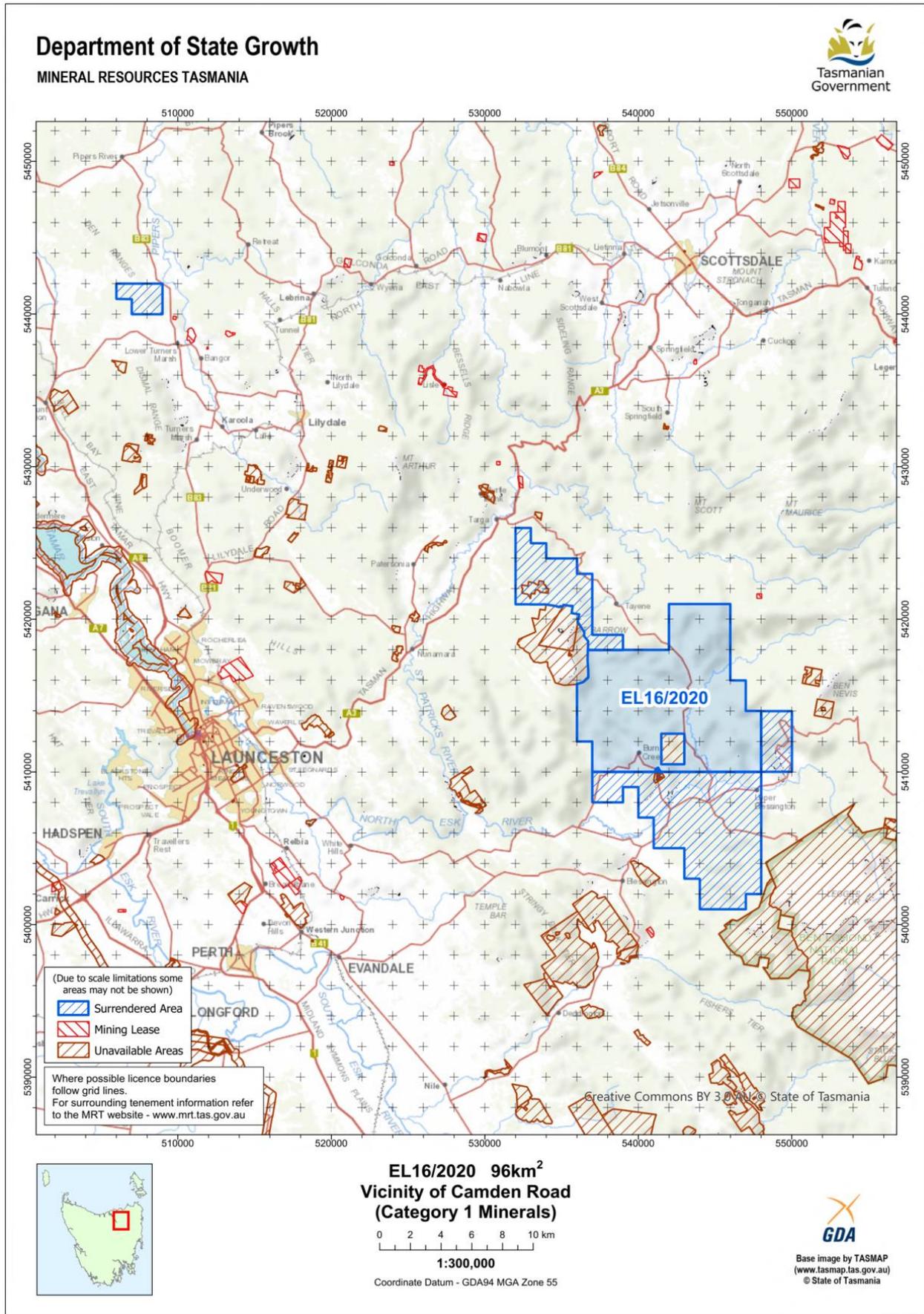


Figure 3. EL 16/2020 Surrendered Area Location Plan (MRT Issue)

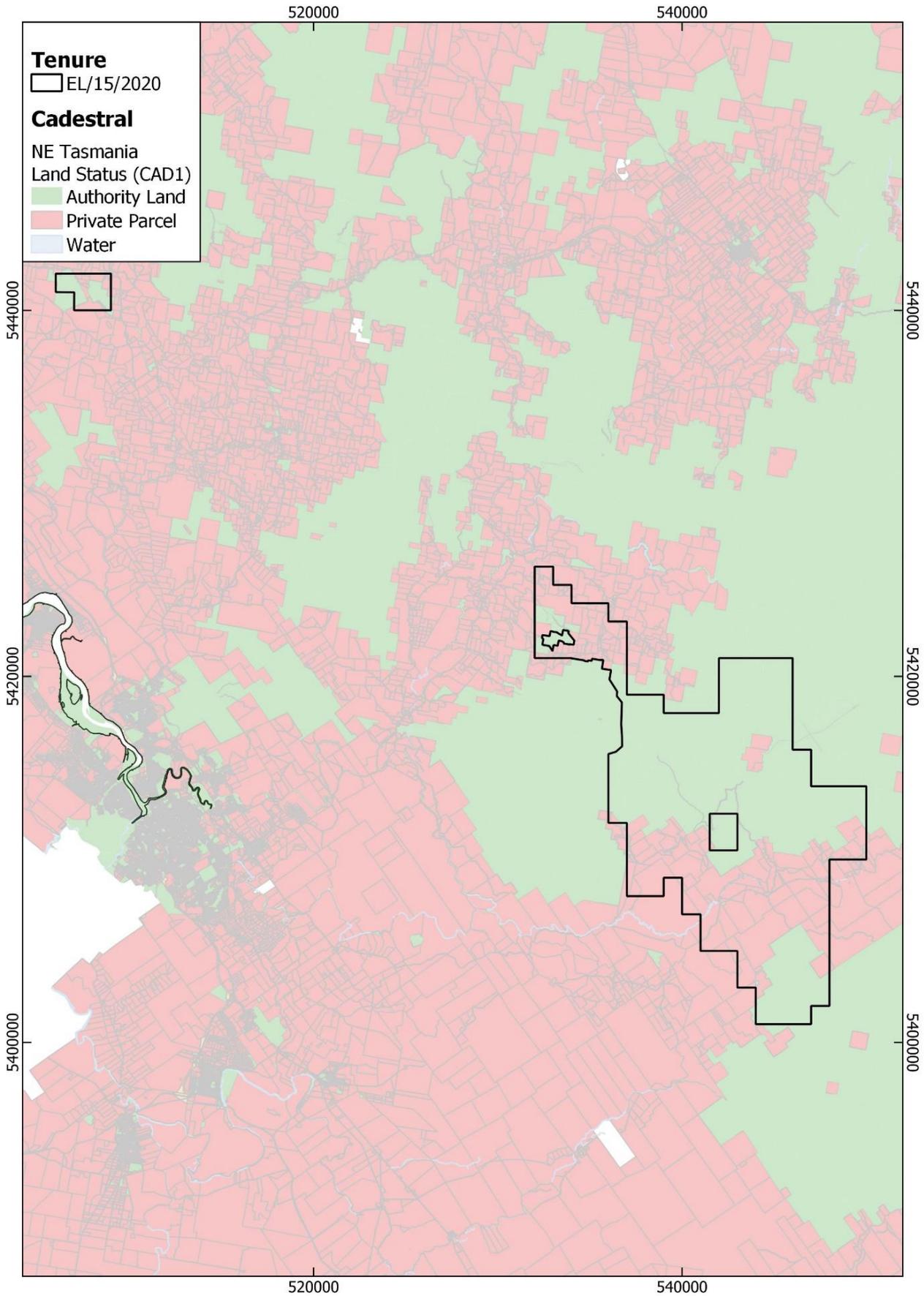


Figure 4. EL 16/2020 Land Tenure Map (Surrendered and Retained Areas shown)

### 3 REVIEW OF PREVIOUS WORK

#### 3.1 Historic Summary

A summary of work completed on EL 16/2020 (Surrendered and Retained Areas) prior to Tarcoola is listed in Table 1 with work completed by Tarcoola listed in Table 2.

**Table 1. Historic Exploration Summary – EL 16/2020**

EL16/2020 Camden Road					
Company	Year	Location	Activity	Comments	Report
MRT	2007	NE Tasmania	Aeromagnetic survey	200m fls	
MRT	1999	Nth Tasmania	Aeromagnetic survey	200m fls	
TGS	1993	Pipers River	Aeromagnetic survey	200m fls	
Placeco Aust	1988	Burns Creek	Rock chip sampling	As, Au	88-2846
Billiton	1989	Regional	Rock chip sampling	Ag, As, Au, Ba, Bi, Cu, Pb, Sb, Sn, W, Zn	92-3337

**Table 2. Tarcoola Exploration Summary – EL 16/2020**

EL16/2020 Camden Road					
Year	Location	Activity	Comments	Report	
2020	Tarcoola Iron tenements	Historic geochemistry database and GIS environment. Ross Corben	Soil, stream, rock chip, drilling and min occurrences	2021-22	
2020 - 2021	Tarcoola Iron tenements	Reprocessing of Geophysical surveys. Phil Muir	aeromagnetic, radiometric and gravity surveys	2021-22	
2020 - 2021	Tarcoola Iron tenements	Initial Desktop Targeting. Gary Fietz and Tom Whiting	Identification of 50 conceptual desktop gold exploration targets	2021-22	
2021 - 2022	Tarcoola Iron tenements	Public file company geochemistry compilation and GIS environment. Adrian Rigg	Soil, stream, and rock chip sampling data not available in MRT database	2021-22	
2021 - present	Tarcoola Iron tenements	Desktop targeting and Areas of Interest study. Josh Phillips	Exploitation Targets identified	2021-22	
2021 - 2022	Burns Creek	Reconnaissance rock chip sampling (3 samples)	No Significant results	2021-22	
2021 - 2022	Elverton	Reconnaissance stream sediment sampling (3 samples)	No Significant results	2021-22 2022-23	
2021 - 2022	North Esk / Upper Blessington	Reconnaissance rock chip sampling (21 samples) over North Esk and Upper Blessington Au targets	Underwhelming results with best results returning 0.031ppm Au and 0.014ppm Au at Upper Blessington	2021-22 2022-23	
2021- 2022	Upper Blessington / Camden Road	Stream sediment sampling program (16 samples) Upper Blessington Au target and Camden Road area to north	Best results returned 0.19ppm and 0.15ppm Au in Camdern Rd area	2021-22	
2022 - 2023	Camden Road	Follow up stream sediment sampling program (13 samples)	Best results returned 0.92ppm and 0.13ppm Au	2022-23	
2022 - 2023	Mount Barrow North	Minor rock chip sampling (4 samples)	No Significant results	2022-23	
2021-2022	Burns Creek, Elverton, Ben Lomond & North Esk	Magnetic Inversion modelling, Mitre Geophysics	3D magnetic inversion models of Burns Creek, Elverton, Ben Lomond & North Esk Au targets	2021-22	

## 4 EXPLORATION COMPLETED DURING REPORTING PERIOD

This section covers work completed by Tarcoola on the EL 16/2020 Surrendered Area (93 km<sup>2</sup>) during the entire term the ground has been held from 16 August 2021 to 20 September 2024.

### 4.1 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 in NE Tasmania. In addition to the 2007 Northeast Tasmania and 1999 Northern Tasmania regional aeromagnetic and radiometric surveys, 6 local aeromagnetic surveys over Tarcoola'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.

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

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

### 4.3 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. This data was added to the Access database and GIS environments by Geowiz.

A total of 19 rock chip samples, nil stream sediment samples and nil soil samples were captured from company reports within the EL 16/2020 Surrendered Area. This data is provided in **Appendix B**.

#### 4.4 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. More recently all the data has been migrated into a QGIS workspace now used for analysis by Tarcoola's technical team.

Targets identified within the EL 16/2020 Surrendered Area include:

**Mt Barrow Nth AOI (Au)** - located immediately to the north of the Mount Barrow Reserve and selected for a zone of anomalously high magnetics in an area of Mathinna Supergroup Sediments, interpreted to reflect the Diddleum Plains granodiorite and associated hornfelsing of Mathinna group sediments at depth. In addition, this area contains mapped thrust faults, possible fold closures, and 3 anomalous historic stream sediment samples that return 0.08, 0.16 and 0.25 g/t Au.

**Elverton AOI (Au)** – located approximately 6km north of the rural township of Blessington and selected for a doughnut shaped magnetic feature, occurring at a major structural intersection of conjugate NW-striking and NE striking faults, under shallow alluvial cover.

**Upper Blessington AOI (Au)** – located immediately to the west of the rural township of Upper Blessington, a large target selected due to its magnetic signature in an area of complex folding/faulting, potential structural offset fault intersections, old workings and associated historic Au stream sediments up to 0.15 ppm Au and historic rock chip samples up to 1.3% Au.

**Ben Lomond AOI (Au)** – located immediately to the northeast of the Ben Lomond National Park and selected for its anomalous magnetic high over a region of granodiorite contacting Mathinna sandstone under a ferruginous gravel and ironstone Cenozoic cover. This target exists over private freehold land with permission to access welcomed by the landowner.

## 4.5 Surface Geochemistry Programs

### 4.5.1 Mt Barrow Nth AOI (Au)

One rock chip sample was collected to the east of the Mt Barrow North AOI (Au) within the EL 16/2020 Surrendered Area in July 2022 as part of a reconnaissance program in the area.

The rock chip sample was analysed by four acid digest with ICPMS finish, with Au by fire assay (ALS Codes ME-MS61 + AuAA23).

Rockchip sampling results over the Mt Barrow North AOI (Au) are included in **Appendix C** and shown in Figure 5.

### 4.5.2 Elverton AOI (Au)

#### *Rockchip Sampling*

One rock chip sample was collected over the Elverton AOI (Au) in December 2021 as part of a reconnaissance program in the area.

The rockchip sample was analysed by four acid digest with ICPMS finish, with Au by fire assay (ALS Codes ME-MS61 + AuAA23).

Rockchip sampling results over the Elverton AOI (Au) are included in **Appendix C** and shown in Figure 5.

#### *Stream Sediment Sampling*

A reconnaissance stream sediment sampling program of 3 samples were collected over the Elverton AOI (Au) in September 2022.

Stream sediment samples were sieved to -80 mesh in the field. Stream Sediment samples were taken to ALS Burnie for sample preparation including coarse crushing and pulverisation. Stream sediment samples were analysed by ALS for all elements using conventional aqua-regia digest and multi-element analysis by ICP-MS and ICP-AES finish (ALS method AuME-TL43).

Stream sediment sampling results over Elverton AOI (Au) are included in **Appendix D** and shown in Figure 5.

### 4.5.3 Upper Blessington AOI (Au)

#### *Rockchip Sampling*

A reconnaissance rock chip sampling program of 9 samples were collected over the Upper Blessington AOI (Au) within the EL 16/2020 Surrendered Area in December 2021.

Rockchip samples were analysed by four acid digest with ICPMS finish, with Au by fire assay (ALS Codes ME-MS61 + AuAA23).

Rockchip sampling results over the Upper Blessington AOI (Au) are included in **Appendix C** and shown in Figure 5.

#### *Stream Sediment Sampling*

A reconnaissance stream sediment sampling program of 9 samples were collected over the Upper Blessington AOI (Au) and surrounding area within the EL 16/2020 Surrendered Area in July 2022.

Stream sediment samples were sieved to -80 mesh in the field. Stream Sediment samples were taken to ALS Burnie for sample preparation including coarse crushing and pulverisation. Stream sediment samples were analysed by ALS for all elements using conventional aqua-regia digest and multi-element analysis by ICP-MS and ICP-AES finish (ALS method AuME-TL43).

Stream sediment sampling results over the Upper Blessington AOI (Au) are included in **Appendix D** and shown in Figure 5.

### 4.5.4 Ben Lomond AOI (Au)

No sampling has been undertaken over the Ben Lomond AOI (Au).

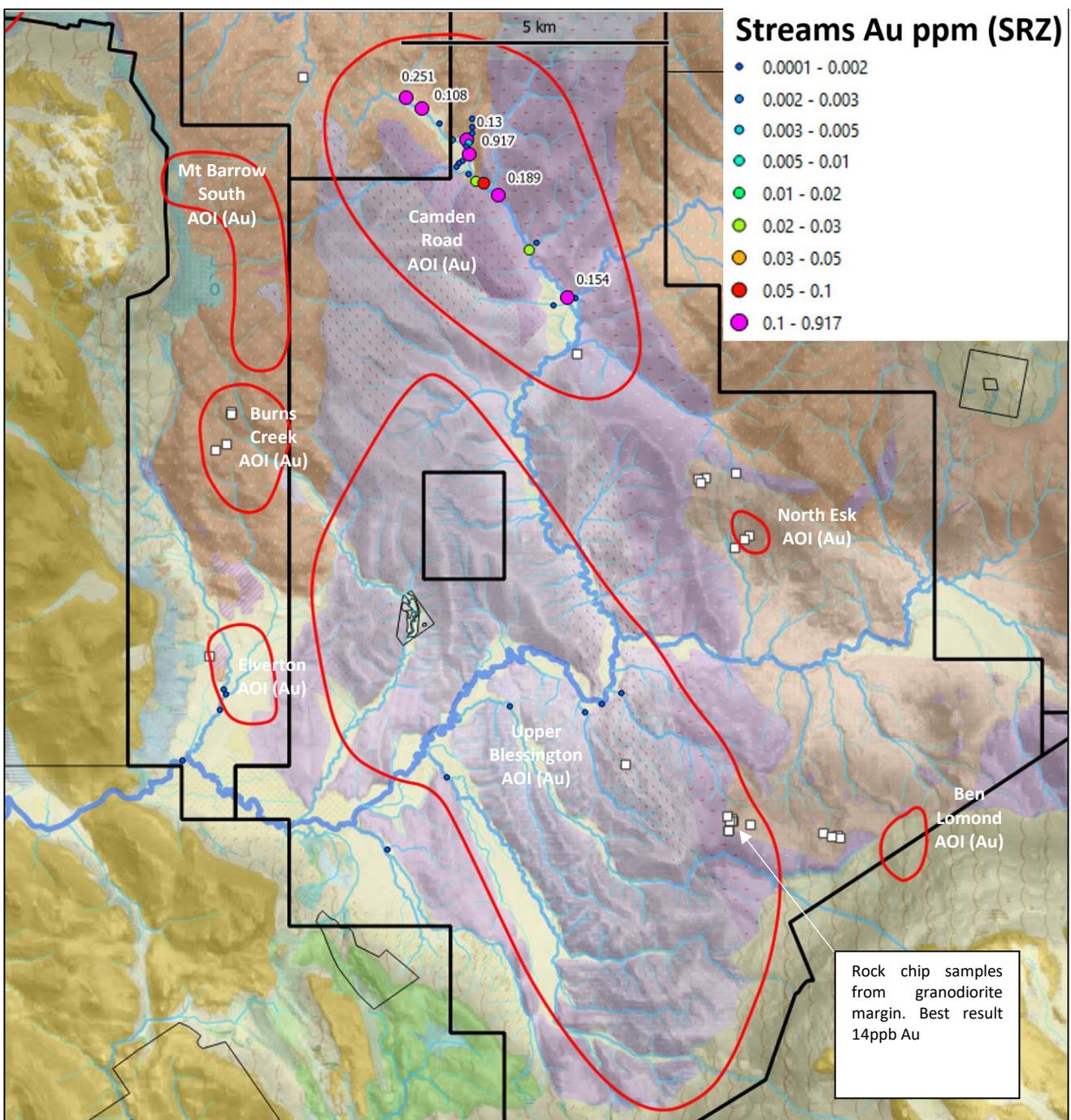


Figure 5. Blessington Area Tarcoola Stream Sediment Results (legend) and Rockchip Sampling Locations (white squares – NSR), 25K Geology

(Note: previous EL 16/2020 and EL 13/2020 boundaries shown, includes targets and results within EL 16/2020 Surrendered and Retained Area)

#### 4.6 Magnetic Inversion Modelling

Magnetic inversion modelling was undertaken by Mitre Geophysics for Tarcoola in 2022 over the following targets within the EL 16/2020 Surrendered Area:

- Elverton
- Ben Lomond

Presentations summarising the results of the Elverton and Ben Lomond Magnetic Inversion modelling, and the inversion data is provided in **Appendix E**.

## **5 DISCUSSION OF RESULTS**

### **5.1.1 Mt Barrow Nth AOI (Au)**

The 1 rock chip sample collected to the east of the Mt Barrow North AOI (Au) within the EL 16/2020 Surrendered Area as part of a reconnaissance program in the area returned no significant results.

### **5.1.2 Elverton AOI (Au)**

1 rock chip sample and 3 stream sediment samples collected over the Elverton AOI (Au) in December 2021 and September 2022 respectively as part of a reconnaissance programs in the area returned no significant results.

### **5.1.3 Upper Blessington AOI (Au)**

The reconnaissance rock chip sampling program of 9 samples collected over the Upper Blessington AOI (Au) within the EL 16/2020 Surrendered Area returned no significant results other than one slightly anomalous rock chip result of 0.014ppm Au taken from the granodiorite margin.

The reconnaissance stream sediment sampling program of 9 samples collected over the Upper Blessington AOI (Au) and surrounding area within the EL 16/2020 Surrendered Area returned no significant results.

The Tarcoola rock chip and stream sediment sampling results over the Upper Blessington AOI (Au) within the EL 16/2020 Surrendered Area failed to validate anomalous historic rock chip and stream sediment Au results, thus downgrading the Upper Blessington Au target.

Strongly anomalous gold results were however returned to the north of the Upper Blessington Au target over the Camden Road Au target within the Retained Area of EL 16/2020 and not covered in this report (see Figure 5).

## **6 CONCLUSIONS**

### **6.1 Recommendations**

Reconnaissance rock chip and stream sediment sampling undertaken by Tarcoola over the Mount Barrow North, Elverton and Upper Blessington Au targets within the EL 16/2020 Surrendered Area returned no significant results. Only a very small number of samples were taken, however, and these targets were not fully tested.

Although much of the gold potential within the EL 16/2020 Surrendered Area remains untested, the priority of the gold targets within the EL 16/2020 Surrendered Area was downgraded following a review by Tarcoola conducted in November 2023 with a decision made to surrender these areas to reduce holding costs.

Strongly anomalous gold results returned to the north of the Upper Blessington Au target over the Camden Road Au target within the Retained Area of EL 16/2020 were however encouraging and will be followed up by Tarcoola.

The magnetic inversions completed by Mitre Geophysics over the Elverton and Ben Lomond Au targets demonstrates, if nothing else, that these targets are geologic in nature and not related to topographic effects or strong remanence. Further work is required to now test these anomalies.

## **7 FUTURE EXPLORATION**

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

## **8 ENVIRONMENTAL MANAGEMENT**

Vegetation cutting for access to sample sites has been the only environmental disturbances occurring from exploration activities. All soil sampling holes were backfilled following sample collection. No recommendations required.

## **9 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.

## 10 REPORTING BIBLIOGRAPHY

Table 3 below lists all reports provided by Tarcoola for EL 16/2020 during the entire term Tarcoola has held the tenement.

**Table 3. EL 16/2020 List of Reports Provided by Tarcoola During Entire Term**

PERIOD	TITLE	AUTHOR	APPENIDCES
16 August 2021 to 15 August 2022	EL 16_2020 Annual Report, 16 August 2022 (non-public)	R. Lockley, R. Spencer-Llyod	Appendix A - Reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (P. Muir)  Appendix B – Historic Geochemistry Database (Microsoft Access Database), Adrian Rigg, Ross Corben  Appendix C - Magnetic inversion modelling, Mitre Geophysics 2020
16 August 2022 to 15 August 2023	EL 16_2020 Annual Report, 16 August 2023 (non-public)	R. Lockley	Appendix A - EL 16_2020, Geochemical data.csv, Ross Corben, Geowiz Consulting, July 2023
16 August 2023 to 15 August 2024	EL 16_2020 Annual Report, 15 August 2024 (non-public)	J. Phillips	None
16 August 2021 to 15 August 2022	EL 13_2020 Annual Report, 16 August 2022 (non-public)	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 (Adrian Rigg, Ross Corben)
16 August 2022 to 15 August 2023	EL 13_2020 Annual Report, 16 August 2023 (non-public)	R. Lockley	Appendix A - EL 13_2020, Geochemical data.csv, Ross Corben, Geowiz Consulting, July 2023
16 August 2021 to 15 August 2022	EL 14_2020 Annual Report, 16 August 2022 (non-public)	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 (Adrian Rigg, Ross Corben)  Appendix C - Magnetic inversion modelling – Elverton and Burns Creek, Mitre Geophysics 2020
16 August 2021 to 12 Jan 2024	EL 16/2020 Partial Surrender Report (109 km <sup>2</sup> Surrendered Area), 14 March 2024 (public)	G Fietz, J Phillips, R. Spencer-Lloyd	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)

			Appendix D - Magnetic Inversion modelling EL16/2020 Ben Lomond Target , Mitre Geophysics
16 August 2021 to 5 Sept 2022	EL 13/2020 Partial Surrender Report (134 km <sup>2</sup> Surrendered Area), 5 December 2022 (public)	G. Fietz	Appendix A - Phil Muir, Southern Mineral Exploration Geophysics, Nov 2020 – Jan 2021, Reprocessed aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania.
16 August 2021 to 12 Jan 2024	EL 13/2020 Partial Surrender Report (117 km <sup>2</sup> Surrendered Area), 14 March 2024 (public)	G Fietz, J Phillips, R. Spencer- Lloyd	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)
16 August 2021 to 5 Sept 2022	EL 14/2020 Partial Surrender Report (191 km <sup>2</sup> Surrendered Area), 5 December 2022 (public)	G. Fietz	Appendix A - Phil Muir, Southern Mineral Exploration Geophysics, Nov 2020 – Jan 2021, Reprocessed aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania.

## 11 REFERENCES

See section 3.1 for references to Annual Reports covering historic exploration completed over EL 16/2020. 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.

## 12 APPENDICES

- Appendix A Reprocessed aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola, NE Tasmania (Phil Muir, Southern Mineral Exploration Geophysics, Nov 2020 – Jan 2021)
- Appendix B Historic Geochemical data captured from company reports over EL 16/2020 Surrendered Area collected by GIS consultant Adrian Rigg. Microsoft Excel file. (Ross Corben, Geowiz Consulting)
- Appendix C Tarcoola EL 16/2020 Rock Chip Sampling Results. Microsoft Excel file (Ross Corben, Geowiz Consulting)
- Appendix D Tarcoola EL 16/2020 Stream Sediment Sampling Results. Microsoft Excel file (Ross Corben, Geowiz Consulting)
- Appendix E Magnetic inversion modelling for Elverton and Ben Lomond targets, Mitre Geophysics 2022.