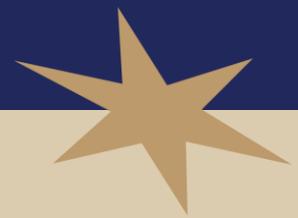




STELLAR RESOURCES LIMITED

Tarcoola Iron Pty Ltd

## EL3/2021 (Quakers Ranges)



### FULL SURRENDER REPORT FOR THE PERIOD

26 May 2022 to 8 January 2024 (Entire Term)

Compiled by: Gary Fietz, Josh Phillips and Richard Spencer-Lloyd,  
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DATE: 14 March 2024

Datum used in report: GDA94.

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## ABSTRACT

This Full Surrender Report covers work completed on the 44 km<sup>2</sup> Surrendered Area of EL3/2021 (the entire tenement) surrendered on 8 January 2024 by Tarcoola Iron Pty Ltd (“Tarcoola”), a wholly owned subsidiary of Stellar Resources Limited, for the entire term EL3/2021 has been held by Tarcoola from 26 May 2022 to 8 January 2024. EL3/2021 is located in the Quakers Ranges area east and south of Musselroe Bay, NE Tasmania

Tarcoola currently holds 5 EL’s 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).

Areas of NE Tasmania are also prospective for granite-related tin-tungsten deposits, hosting the historic Aberfoyle/Storeys Creek and Anchor tin mines as well as a further 200 additional tin-bearing hard-rock mineral occurrences, associated with late-stage alkali granites. Five of these late-stage alkali granites occur on Tarcoola’s EL’s in NE Tasmania which are prospective for Sn, W and are also considered targets for mica-hosted lithium and other critical minerals which may occur in greisens in the alkali granite roof zones.

EL 3/2021 is situated north along strike of lineaments hosting the Mathinna Group goldfields of Grand Flaneur and Portland (held by Flynn Gold). Throughout EL 3/2021 the magnetics show northerly trending linear-arcuate features possibly consistent with northern extension of these gold hosting lineaments under cover.

A late stage, fractionated alkali granite is mapped through the western half of the tenement over the Rushy Lagoon target which is also considered prospective for Sn-W, Li, with alkali granite also mapped to the east of the tenement with a similar magnetic low.

Work completed on EL3/2021 during the entire term the ground has been held from (26 May 2022 to 8 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 EL3/2021:
  - Rushy Lagoon Sn-Li-Au target (AOI\_030) – Magnetic features in mapped an alkali granite
  - Musselroe Bay Au target (AOI\_031) - Magnetic feature at contact between Mathinna Group sediments and granite (covered)
- Reconnaissance visits and surface geochemistry:
  - 7 rock chip and 6 stream sediment samples were collected between August and October 2022 over the Rushy Lagoon target (AOI\_030). No significant results were returned.

The tenement is heavily covered by quaternary cover to the north and east of the tenement and is poorly serviced by tracks and swampy in places making surface geochemistry and mapping work challenging. No surface geochemistry samples were able to be collected over the Musselroe Bay Au target (AOI\_031) on the eastern part of the tenement for these reasons.

- Magnetic inversion modelling of the Musselroe Bay Au target (AOI\_031) was undertaken by Mite Geophysics. The strongest magnetic anomaly in the area of Musselroe Bay is ~900m NS by ~600m EW with an overall target area of 5km NS by 1km E-W. These targets were not drill tested.

Tarcoola conducted a review of its NE Tasmania exploration projects in November 2023 which resulted in the priority of the targets within EL3/2021 being downgraded and a decision being made to surrender the entire area to reduce costs.

Expenditure on EL3/2021 during the entire term the ground has been held from (26 May 2022 to 8 January 2024) was \$23,395.

**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 – EL3/2021 Surrendered Area .....8

        1.2.1 Exploration Licence Summary - EL3/2021 Surrendered Area .....8

2 REVIEW OF PREVIOUS WORK ..... 10

    2.1 Historic Summary ..... 10

3 EXPLORATION COMPLETED DURING REPORTING PERIOD ..... 10

    3.1 Reprocessing of Geophysical surveys ..... 10

    3.2 Creation of Historic Exploration Database and GIS Environment ..... 10

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

    3.4 Desktop Targeting Studies ..... 11

    3.5 Reconnaissance Surface Geochemistry ..... 11

        3.5.1 Rushy Lagoon Sn-Li-Au target (AOI\_030) ..... 11

        3.5.2 Musselroe Bay Au target (AOI\_031) ..... 13

    3.6 Magnetic Inversion Modelling ..... 13

4 DISCUSSION OF RESULTS ..... 13

    4.1 Rushy Lagoon Sn-Li-Au target (AOI\_030) ..... 13

5 CONCLUSIONS ..... 14

6 FUTURE EXPLORATION ..... 14

7 ENVIRONMENTAL MANAGEMENT ..... 14

8 EXPENDITURE ..... 15

9 REPORTING BIBLIOGRAPHY ..... 16

10 REFERENCES ..... 16

APPENDICES ..... 17

**List of Tables**

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

Table 2. EL3/2021 Expenditure (26 May 2022 to 8 January 2024) ..... 15

Table 3. EL3/2021 List of Reports Provided During Exploration Tenement Term ..... 16

**List of Figures**

Figure 1. Activities Summary Map - EL3/2021 Surrendered Area (26 May 2022 to 8 January 2024) .....5

Figure 2. EL3/2021 Surrendered Area (entire EL3/2021 area shaded blue has been surrendered) .....9

Figure 3. Rushy Lagoon Sn-Li-Au Target Rock Chip and Stream Sediment Sample Results ..... 12

Figure 4. Musselroe Bay, TMI model is in red and the VRMI model is in yellow. Clipped to >0.004 SI mag sus. .... 13

Figure 5. Example of UST in aplitic tourmaline-bearing granite ..... 14

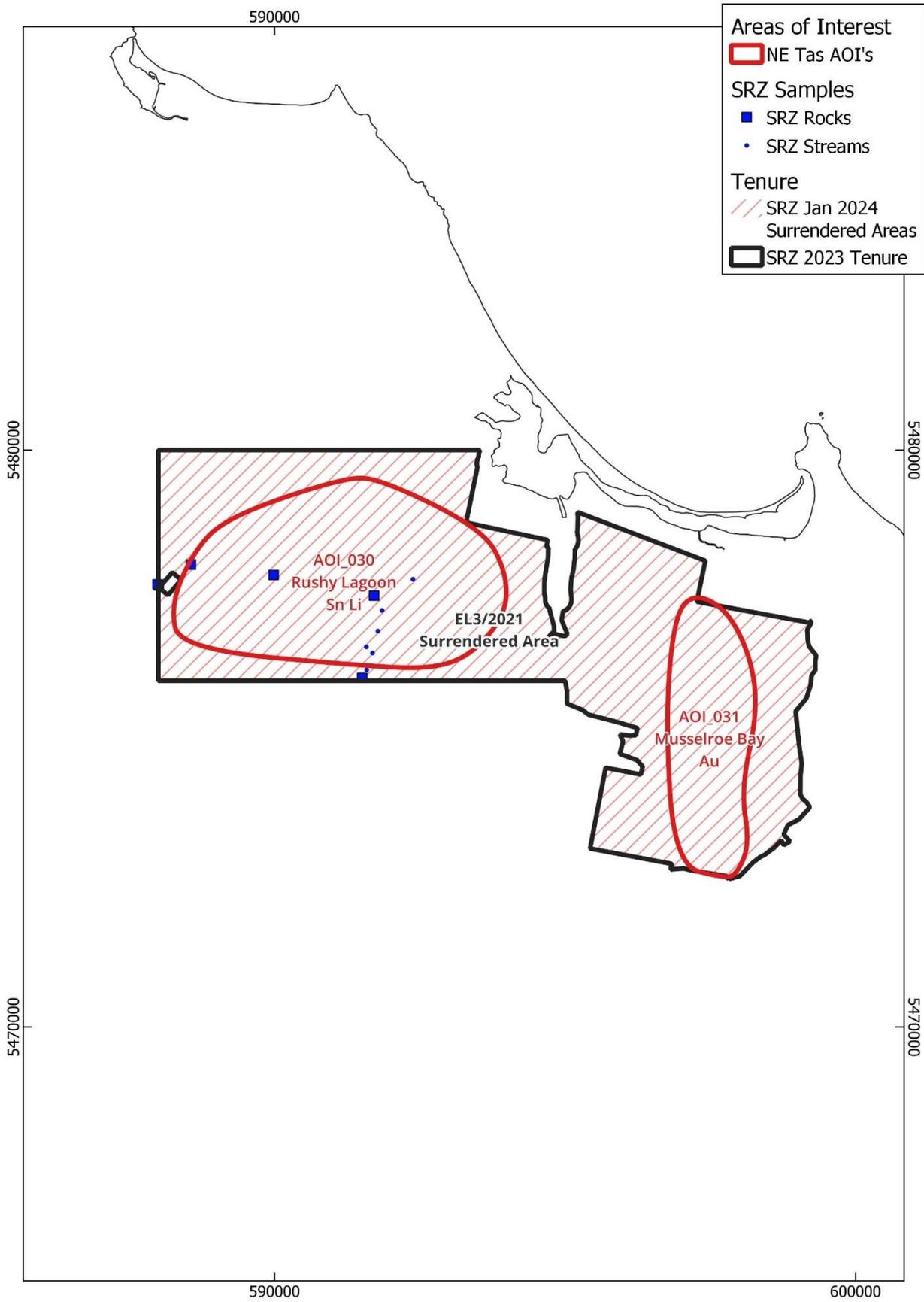


Figure 1. Activities Summary Map - EL3/2021 Surrendered Area (26 May 2022 to 8 January 2024)

# 1 INTRODUCTION

## 1.1 Exploration Rationale

### 1.1.1 Regional

#### 1.1.1.1 Gold

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.

#### 1.1.1.2 Tin-Lithium

Areas of NE Tasmania are also prospective for granite-related tin-tungsten deposits, hosting the historic Aberfoyle/Storeys Creek and Anchor tin mines as well as a further 200 additional tin-bearing hard-rock mineral occurrences, associated with late-stage alkali granites. North-east Tasmania is underlain by numerous facies of the regionally extensive, multiphase granite-granodiorite complex of the Scottsdale, Blue Tier and East Coast Batholiths. These regional scale plutons are intruded by late-stage highly fractionated alkali granites that are spatially and genetically associated with the hard-rock tin mines and occurrences. Tarcoola Iron hold majority tenure over three of the five significant alkali granite occurrences in the region, which are now also considered prospective for Li and other critical minerals hosted in greisen which may occur in the alkali granite roof zones. Historic open-file rock chip data includes values >100ppm Li, with several values ranging between 600-1400ppm Li in the Mt Paris and Lottah areas.

### 1.1.2 Prospect

#### 1.1.2.1 Rushy Lagoon Sn-Li-Au Target (AOI\_030)

EL 3/2021 is situated north along strike of lineaments that host the Mathinna Group goldfields of Grand Flaneur and Portland. Throughout EL 3/2021 the magnetics show northerly trending linear-arcuate features possibly consistent with northern extension of these gold hosting lineaments under cover. Overall, the area is poorly sampled.

The Rushy Lagoon Sn-Li-Au Target (AOI\_030) is largely mapped as alkali granite, but the magnetic lineament suggested there may be some remnant veneer of folded Mathinna group sediments, making the area prospective for Au in the fold hinges of remnant Mathinna and/or Sn greisen mineralisation preserved in the upper contact of the alkali granite and its host.

#### 1.1.2.2 Musselroe Bay Au Target (AOI\_031)

The Musselroe Bay Au target (AOI\_031) was identified on the basis of anomalous Au in streams (0.16 ppm), the covered (and therefore unknown) nature of the granite contact with Mathinna Group metasediments/hornfels, and the erratic magnetics. The magnetics shows a linear low, often associated with strong sericitization, oriented NW and intersecting the upper parts of the drainage that contains anomalous Au in streams. The magnetics also show a strong sub-circular magnetic high in the north end of the AOI that is unexplained by the geology, and much of the area is covered by unconsolidated alluvial and beach material, suggesting any alteration or mineralisation would be blind and therefore not subject to previous exploration.

## 1.2 Exploration Licence – EL3/2021 Surrendered Area

EL3/2021 was granted to Tarcoola Iron Pty Ltd (“Tarcoola”), a wholly owned subsidiary of Stellar Resources Limited, on 26 May 2022.

On 8 January 2024, Mineral Resources Tasmania approved Tarcoola’s Full Surrender application to surrender the entire 44 km<sup>2</sup> of EL3/2021 (see Figure 2).

This Full Surrender Report for EL3/2021, covers work completed on the 44 km<sup>2</sup> Surrendered Area, the entire area of EL3/2021, for the entire term EL3/2021 has been held by Tarcoola (26 May 2022 to 8 January 2024).

Tarcoola Iron Pty Ltd, a 100% owned subsidiary of Stellar Resources Limited, currently holds 5 EL 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 - EL3/2021 Surrendered Area

Tenement number:	EL3/2021 Surrendered Area (entire tenement)
Tenement name:	Quakers Ranges
Tenement area:	44 km <sup>2</sup> Surrendered Area (entire tenement)
Tenement location:	The Surrendered Area is located in the Quakers Ranges area east and south of Musselroe Bay, NE Tasmania
Reporting period:	26 May 2022 to 8 January 2024
Tenement holder:	Tarcoola Iron Pty Ltd., a wholly owned subsidiary of Stellar Resources Limited.

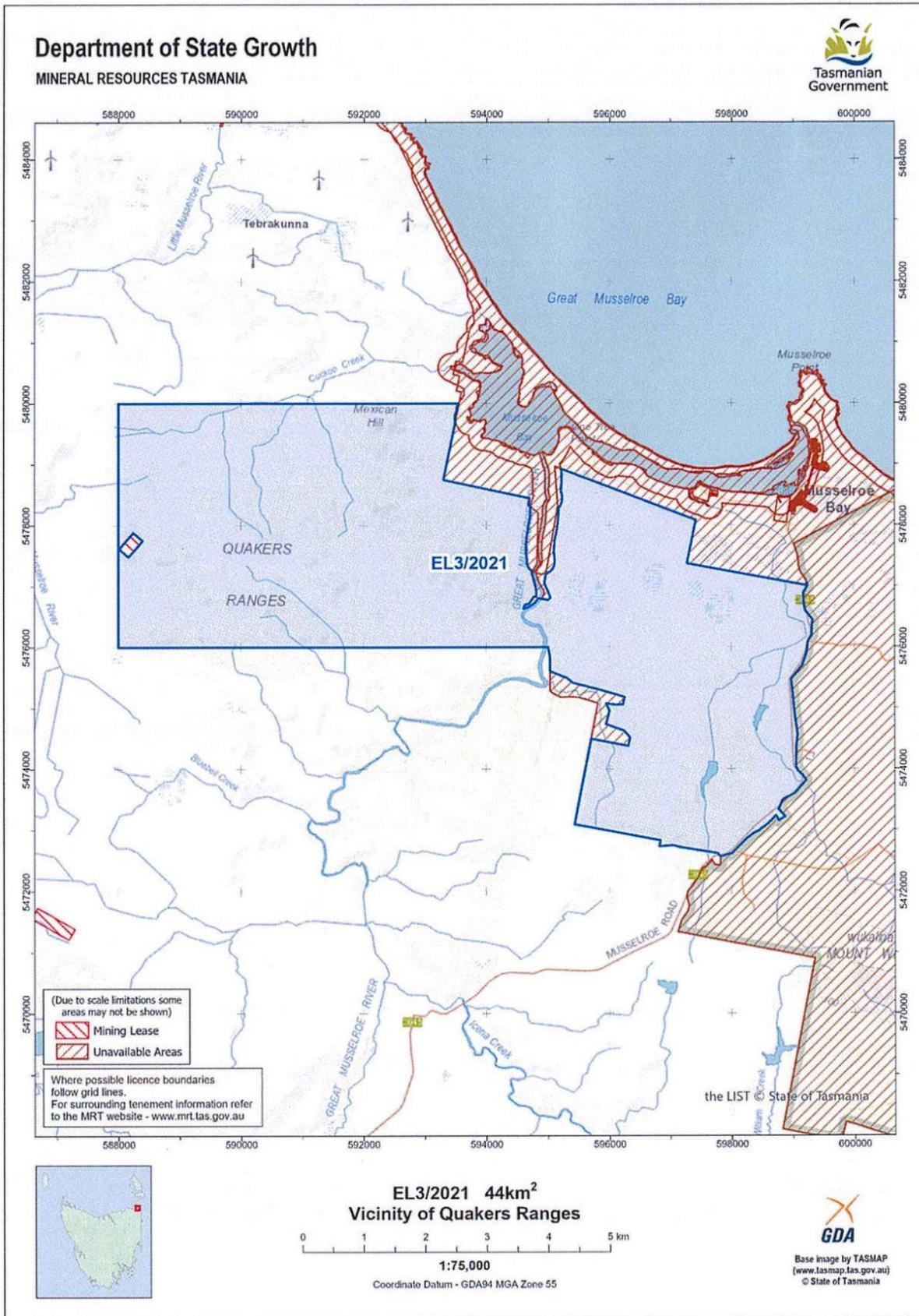


Figure 2. EL3/2021 Surrendered Area (entire EL3/2021 area shaded blue has been surrendered)

## 2 REVIEW OF PREVIOUS WORK

### 2.1 Historic Summary

A review of historic work completed on EL3/2021 was compiled by Adrian Rigg is listed in Table 1.

*Table 1. Historic Exploration Summary*

EL3/2021 Quakers Range					
Company	Year	Location	Activity	Comments	Report
TGS	1987	Gladstone	Aeromagnetic survey	125m fls	
MRT	2007	NE Tasmania	Aeromagnetic survey	200m fls	
MRT		Musselroe Bay	Stream sediment sampling		

## 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 EL3/2021 (44 km<sup>2</sup>) during the entire term the ground has been held from 26 May 2022 to 8 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, zero stream sediment samples and zero soil samples were captured from company reports within the EL3/2021 Surrendered Area. This data is provided in **Appendix B**.

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 EL3/2021 are shown in Figure 1 and include:

- Rushy Lagoon Sn-Li-Au target (AOI\_030) - Magnetic features in mapped an alkali granite
- Musselroe Bay Au target (AOI\_031) - Magnetic feature at contact between Mathinna Group sediments and granite (covered)

### 3.5 Reconnaissance Surface Geochemistry

#### 3.5.1 Rushy Lagoon Sn-Li-Au target (AOI\_030)

7 rock chip and 6 stream sediment samples were collected between August and October 2022 over the Rushy Lagoon target (AOI\_030). These samples were collected over the locations of some the NNW magnetic lineaments thought to represent extension of the gold hosting structures south of the tenement below the Musselroe-Ansons Bay granite. Quaternary cover and limited track access limited the sampling program.

Results from the 7 rock chip samples collected over the Rushy Lagoon target are included in the MS Access database provided in **Appendix C** and shown in Figure 3. No significant Au results were returned from any of these samples.

All samples were located by handheld GPS.

Stream sediment samples were sieved to -80 mesh in the field and analysed at ALS.

Rock chip samples were taken to ALS Burnie for sample preparation including coarse crushing and pulverisation.

Analysis methods used by ALS for rocks and streams included:

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

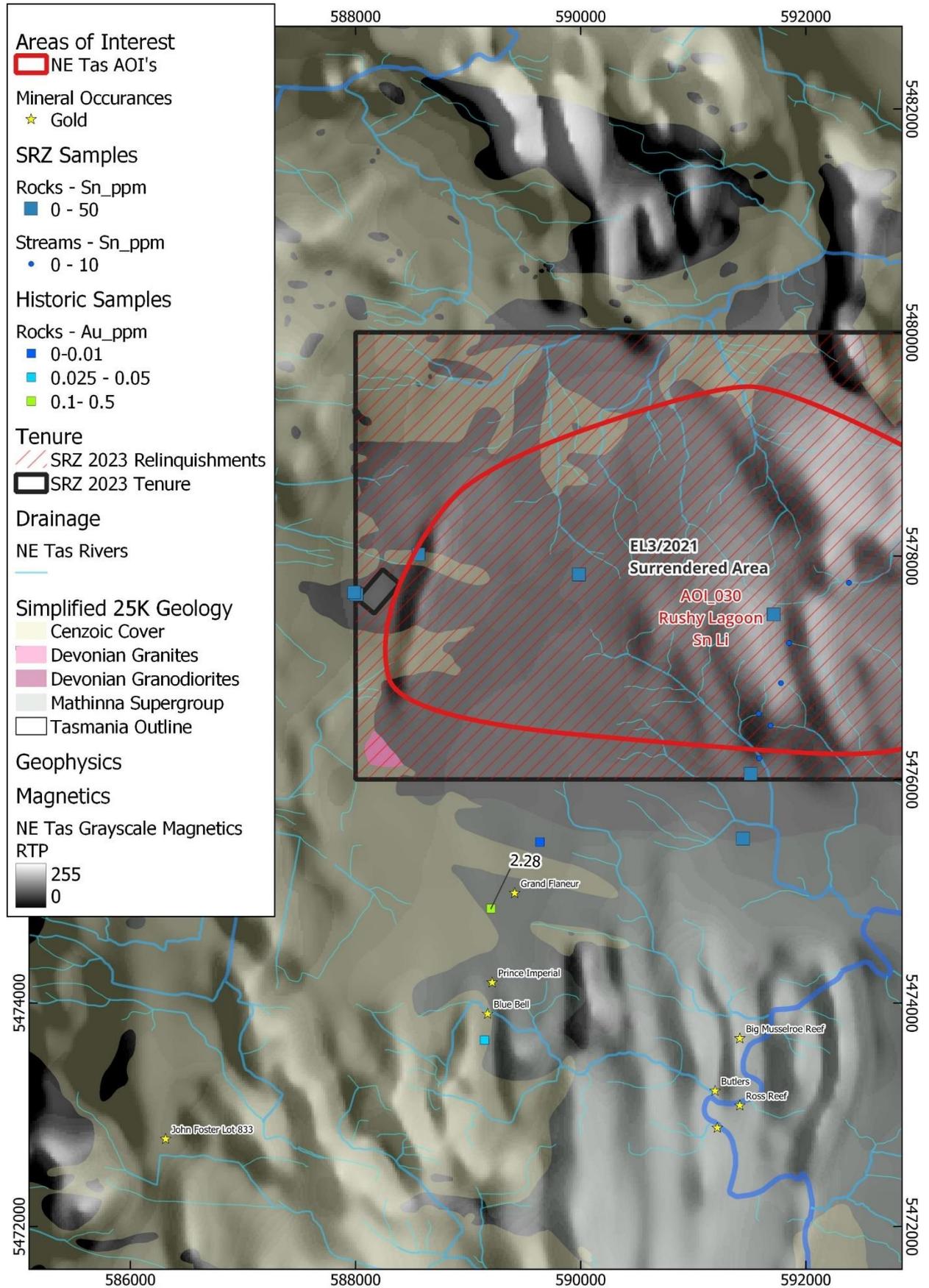


Figure 3. Rushy Lagoon Sn-Li-Au Target Rock Chip and Stream Sediment Sample Results

### 3.5.2 Musselroe Bay Au target (AOI\_031)

Due to the extensive quaternary cover and swampy conditions over the Musselroe Bay Au target (AOI\_031) to the east of the tenement, no surface geochemistry or mapping observations were possible over the target.

## 3.6 Magnetic Inversion Modelling

Magnetic inversion modelling was undertaken by Mitre Geophysics on the Musselroe Bay Au target (AOI\_031) within EL3/2021. See **Appendix C** for report and data.

The strongest magnetic anomaly in the area of Musselroe Bay is ~900m NS by ~600m EW with an overall target area of 5km NS by 1km E-W. A reasonably high amount of remanence was suggested evident in the TMI inversion regarding the misfit error on topography. Further geological understanding is required prior to working up any conclusive drilling target.

There were some similarities in the TMI to VRMI model for the northern anomaly which suggests both could be easily tested with the one drill hole if further surface geochemistry surveys determine this a suitable drill target (Figure 4). Note that it is highly likely that the source is several narrow magnetic zones, but that this type of model is unable to resolve them.

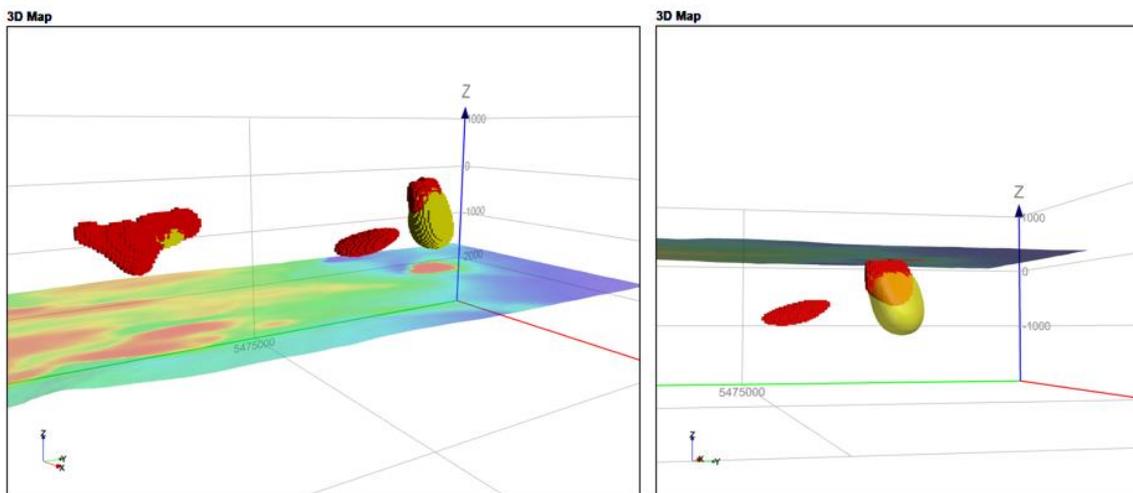


Figure 4. Musselroe Bay, TMI model is in red and the VRMI model is in yellow. Clipped to >0.004 SI mag sus.

## 4 DISCUSSION OF RESULTS

### 4.1 Rushy Lagoon Sn-Li-Au target (AOI\_030)

No systematic geological mapping has been completed however a significant driver of reconnaissance fieldwork was to establish the character of the alkali granite and investigate any possible causes of the magnetic features within the EL, so key geological observations were made during sampling. No Mathinna Group was observed in the area of magnetic lineaments, suggesting that these may be instead related to late dolerite intrusions at depth within, and post-dating, the granite. Geological observations regarding the nature of the granite confirmed an alkali composition. On the far western side of the AOI, strong tourmaline alteration occurs in association with magmatic exsolution textures including Unidirectional Solidification Textures (UST's; see Figure 5), strongly supporting the fluid-rich nature of this granite.



*Figure 5. Example of UST in aplitic tourmaline-bearing granite*

## 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.

It should be noted that due to the extensive Quaternary cover and swampy conditions over much of EL3/21, surface geochemical exploration has been challenging and largely inconclusive with the targets remaining untested.

## 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 on EL3/2021 during the entire term the ground has been held from (26 May 2022 to 8 January 2024) was \$23,395 as detailed in Table 2.

*Table 2. EL3/2021 Expenditure (26 May 2022 to 8 January 2024)*

MRT REPORTING CODE	CATEGORY	EL 19/2020
1.1	Geology*	\$12,039
1.2	Geochemistry	\$1,297
1.3	Geophysics	\$3,310
1.4	Remote sensing	
2.1	Drilling - Gridding	
2.2	Drilling	
3.0	Land access	
4.0	Rehabilitation	
5.0	FS costs	
6.0	Other costs	\$6,748
7.0	Administration/overheads	
<b>TOTALS</b>		<b>\$23,395</b>

\* Geology costs include geology and field support costs, travel accommodation and meals for soil sampling and stream sediment sampling programs

## 9 REPORTING BIBLIOGRAPHY

Annual Technical Reports as provided during the term Tarcoola Iron Pty Ltd have held EL3/2021 is detailed in Table 3 below.

*Table 3. EL3/2021 List of Reports Provided During Exploration Tenement Term*

COMPANY	PERIOD	TITLE	AUTHOR	APPENIDCES
Tarcoola Iron Pty Ltd (Stellar Resources Limited)	26 May 2022 to 25 May 2023	EL3_2021_2023 Annual Technical Report	R. Lockley	Appendix A – Reprocessed Geophysical images (Phil Muir)  Appendix B – EL3_2021, Tarcoola Geochemical data Access database  Appendix C – Mitre Geophysics Inversion Modelling EL3/2021

## 10 REFERENCES

See Table 1 for MRT references to Annual Reports covering historic exploration completed over EL3/2021. All historic listings are referenced by Company, Year, Location, and the relevant Report Number.

Blissett, A.H. 1959. The Geology of the Rossarden-Storeys Creek District. Geological Survey Bulletin 46. Tasmanian department of Mines.

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

Groves D.I., 1972, The Zoned Mineral Deposits of the Scamander-St Helens District, Geological Survey Bulletin No. 53.

Purvis, J.G. 1979. Initial exploration at the old Royal George Tin Mine. CRA Exploration.

Purvis, J.G. 1988 – NE Tasmanian Tin Province

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., Green, G.R. and Calver, C.R. 2006. The geology and mineral deposits of Tasmania: a summary. Geological Survey Bulletin 72. Mineral Resources Tasmania.

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)
- Appendix D    Magnetic Inversion modelling EL3/2021 Targets (Mitre Geophysics)