STELLAR RESOURCES LIMITED

**Tarcoola Iron Pty Ltd**

# EL 19/2020 MT PARIS - PYENGANA

## PARTIAL SURRENDER REPORT FOR THE PERIOD

1 March 2022 – 23 August 2024

Compiled by: Gary Fietz

DATE: 12 September 2024

Datum used in report: GDA94.

Stellar Resources Limited
(ABN 108 758 961)
Level 4, 96-100 Albert Road,
South Melbourne,
Victoria, 3205

## ABSTRACT

This Partial Surrender Report for EL 19/2020 Mt Paris - Pyengana, covers work completed on the 42 km$^2$ surrendered area of EL 19/2020 which Tarcoola Iron Pty Ltd ("Tarcoola"), a wholly owned subsidiary of Stellar Resources Limited, lodged an application to surrender on 23 August 2024. The report covers the entire term the EL 19/2020 Surrendered Area (42 km$^2$) has been held by Tarcoola from 1 March 2022 to 23 August 2024.

The EL 19/2020 Surrendered Area comprises of 2 separate blocks with the northern block located approximately 2km south of Derby / approximately 2km east of Branxholm and the southern block located approximately 1km northwest of Pyengana.

On 18 January 2024, Tarcoola's application to consolidate EL 19/2020 (Scamander), EL 2/2021 (Pyengana and Mt Durham) and EL 3/2022 (Mount Paris and Argonaut Road) into EL 19/2020 was approved by MRT. EL 19/2020 and EL 2/2021 were granted to Tarcoola on 1 March 2022, with EL 3/2022 granted to Tarcoola on 8 September 2022. EL 19/2020 initially covered an area of 239 km$^2$, EL 2/2021 an area of 195 km$^2$ and EL 3/2022 an area of 97 km$^2$. In January 2024, partial surrender applications by Tarcoola were approved for surrenders of 151 km$^2$ from EL 19/2020, 158km$^2$ from EL 2/2021 and 36 km$^2$ from EL 3/2022, with 88 km$^2$ retained from EL 19/2020, 37 km$^2$ retained from EL 2/2021 and 61 km$^2$ retained from EL 3/2022. Following the consolidation of EL 19/2020, EL 2/2021 and EL 3/2022 approved on 18 January 2024, EL 19/2020 had an area of 186 km$^2$. On 23 August 2024 an application was made for a further partial surrender of 42 km$^2$ of EL 19/2020, with an area of 144 km$^2$ of EL 19/2020 now retained.

EL 19/2020 is one of 5 Exploration Licences currently held by Tarcoola, now covering a combined area of 337 km$^2$ 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).

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 held majority tenure over three of the five significant alkali granite occurrences in the region, which are considered prospective for Li hosted in greisens that may occur in the alkali granite roof zones. Historic open-file rock chip assay data contains several values ranging between 600-1400ppm Li associated with the Mt Paris and Lottah alkali granites.

Work completed by Tarcoola on the EL 19/2020 Surrendered Area during the entire term the ground has been held from 1 March 2022 to 23 August 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 19/2020 Surrendered Area:
    - **Mt Paris AOI (Sn-Li) central / eastern part** – located to the east of Branxholm / south of Derby and selected for occurrences of outcropping alkali Mt Paris Granite through the Sideling Sandstone which are exploration targets for mica-hosted lithium, tin, and other critical minerals. Historic rock chip data includes values >100ppm Li, with several values ranging between 600-1400ppm Li in the Mt Paris and Lottah areas. The Mt Paris AOI (Sn-Li) is divided into three parts; a southern part within in the EL 15/2020 Retained Area where best results have been returned to date, a northern part within the EL 15/2020 Surrendered Area, and a central / eastern part within the EL 19/2020 Surrendered Area.
    - **Pyengana AOI (Au) northern extent** – located in the vicinity of Pyengana and selected as an IRGS target for a tightly constrained, isolated area of hornfelsed Mathinna Group sediments, sandwiched

between a series of granites and granodiorites with a ridge in the gravity data and low magnetic signature showing similarities to the Haleys New Country Granite (HNCG) considered causative pluton for the Golden Ridge-Brilliant-Trafalgar IRGS district held by Flynn Gold. The vast majority of the Pyengana AOI (Au) is located to the south in the Retained Area of EL 19/2020 where Tarcoola have undertaken stream sediment and rock chip sampling programs returning slightly anomalous Au and pathfinder elements in some samples (not covered by this report).

- Surface geochemistry programs completed:
  - **Mt Paris AOI (Sn-Li) central / eastern part** - 99 rock chip samples and 21 stream sediment samples were collected between February 2023 and May 2023 within the EL 19/2020 Surrendered Area (central / eastern part of the Mt Paris AOI (Sn-Li)) as part of a major surface geochemistry program targeting mica hosted Li-Sn mineralisation within the Mt Paris Granite on EL 19/2020 and EL 15/2020. Rock chip results within the EL 19/2020 Surrendered Area returned 25 moderately anomalous lithium results >200ppm Li and >700ppm Rb (pathfinder element), with the best result returning 638ppm Li, 1,425ppm Rb, 15g/t Ag and 521ppm Sn. Stream sediment results within the EL 19/2020 Surrendered Area returned only slightly anomalous lithium results with 2 results returning >150ppm Li and >500ppm Rb. Six of the stream sediment results returned high levels of tin with >1,000ppm Sn, and a maximum value of 9,210ppm Sn, probably representing alluvial tin. Although the results of Tarcoola's surface geochemistry sampling program within the EL 19/2020 Surrendered Area returned elevated Li values demonstrating the potential for a greisen/mica-hosted style lithium mineralisation, no economic Li grades were returned.
  - **Pyengana AOI (Au) northern extent** – no surface geochemistry sampling was completed over the Pyengana AOI (Au) within the EL 19/2020 Surrendered Area.

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. Elevated lithium results within the surrendered central / eastern part of the Mt Paris Granite AOI (Sn-Li) demonstrate the potential for greisen/mica-hosted style lithium mineralisation which has not been fully tested.

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**

## List of Tables



## List of Figures



## List of Appendices

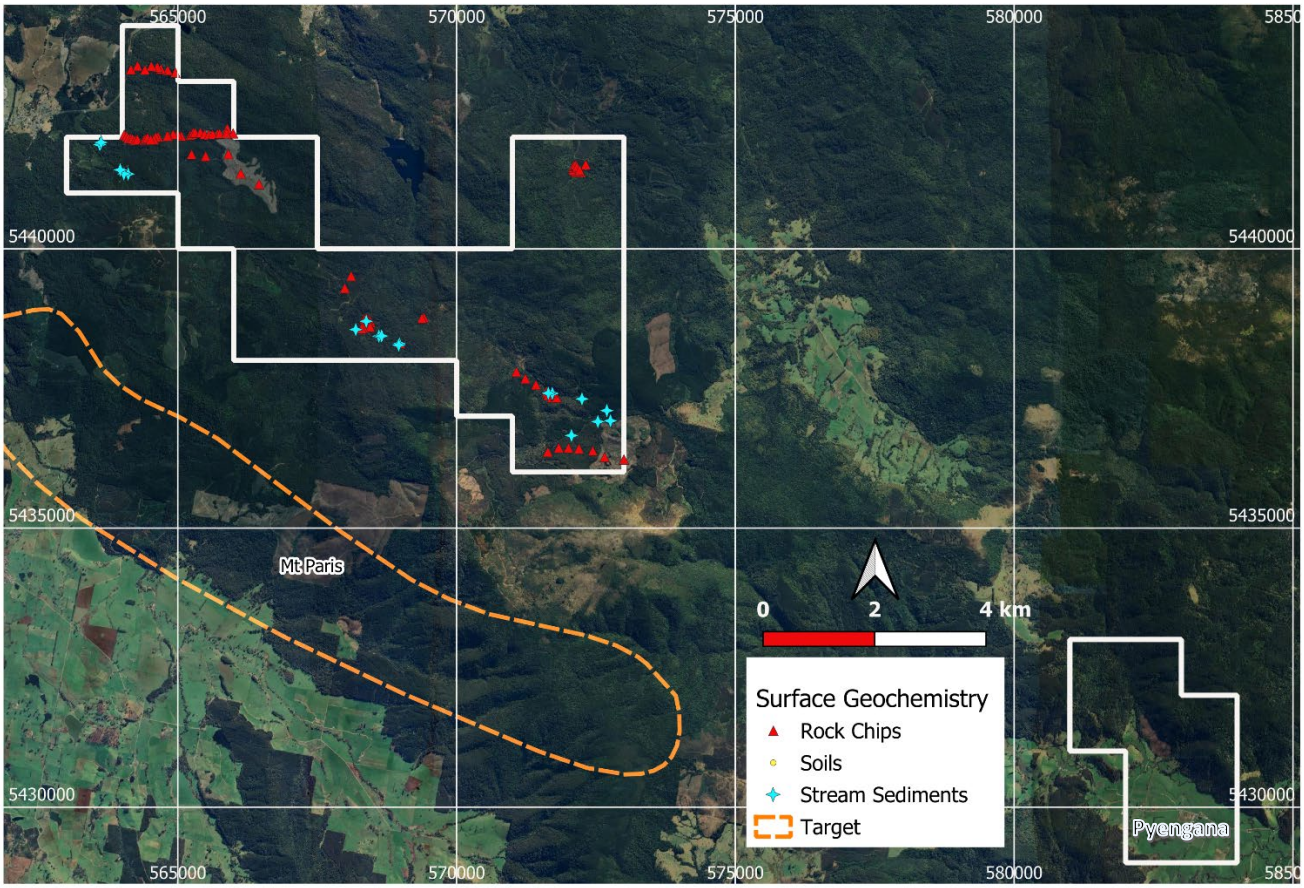


*Figure 1. Activities Summary Map EL 19/2020 Surrendered Area, Entire Term 1 March 2022 to 23 Aug 2024*

# 1 INTRODUCTON

## 1.1 Exploration Rationale

### 1.1.1 Geological Setting

***Gold***

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 Tippogorree Group west of Pipers River during the Benambran, and two subsequent phases of upright folding of Tabberaberan age in the Panama Group east of Pipers River (Reed 2004).

***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 alkali granites. The alkali granite occurrences are also considered important for mica-hosted lithium and other critical minerals. 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 Mineralisation

***Gold***

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.

***Tin-Lithium***

Tin-Tungsten mineralisation is associated with late stage fractionated alkali granites occurring as vein and disseminated deposits. These are often well zoned with respect to mineralisation/metal occurrences (W-Sn-Cu-Pb-Zn-Ag). Greisen/stockwork Sn deposits can also form in roof zones of alkali granites generally with limited depth extent. Greisens on the alkali granite roof zones are prospective for Sn, W, Ta, Be, Rb, Cs, Li, Ba, Sr, LREE, F, B, Pb, Zn, In, Cd.

### 1.1.3 Structure

***Gold***

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*

South of Mt Paris, areas of interest occur to the west of the well-known Mathinna trend, along NW striking second-order structures. Further north, the gold-bearing structures are covered by alluvial material of the Ringarooma valley and/or are truncated by the Mt Paris Granite. Gold prospects identified within the EL 19/2020 Surrendered Area include:

**Pyengana AOI (Au) northern extent -** located in the vicinity of Pyengana and selected for as an IRGS target for a tightly constrained, isolated area of hornfelsed Mathinna Group sediments, sandwiched between a series of granites and granodiorites with a ridge in the gravity data and low magnetic signature showing similarities to the Haleys New Country Granite (HNCG) considered causative pluton for the Golden Ridge-Brilliant-Trafalgar district held by Flynn Gold.

### *Tin-Lithium*

Tin-lithium prospects identified within the EL 19/2020 Surrendered Area include:

**Mt Paris AOI (Sn-Li) central / eastern part** - located between Branxholm and Welborough and selected for occurrences of outcropping alkali Mt Paris Granite through the Sideling Sandstone which are exploration targets for mica-hosted lithium, tin, and other critical minerals. Historic rock chip data includes values >100ppm Li, with several values ranging between 600-1400ppm Li in the Mt Paris and Lottah areas. The Mt Paris AOI includes an area of preserved country-rock overlying the southern flank of the Mt Paris Granite, where isolated windows of granite also crop out. This represents the ideal level of exposure for greisen style Sn-Li mineralisation.

# 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$^2$ over 4 EL's were made on 23 August 2024 as shown in Figure 2. These included an application to surrender an area of 42 km$^2$ of EL 19/2020 made on 23 August 2024.

EL 19/2020 is one of 5 Exploration Licences currently held by Tarcoola, now covering a combined area of 337 km$^2$ in NE Tasmania. Tarcoola is actively exploring for lithium, gold, tin, base metals and critical minerals on the ground it holds in NE Tasmania.

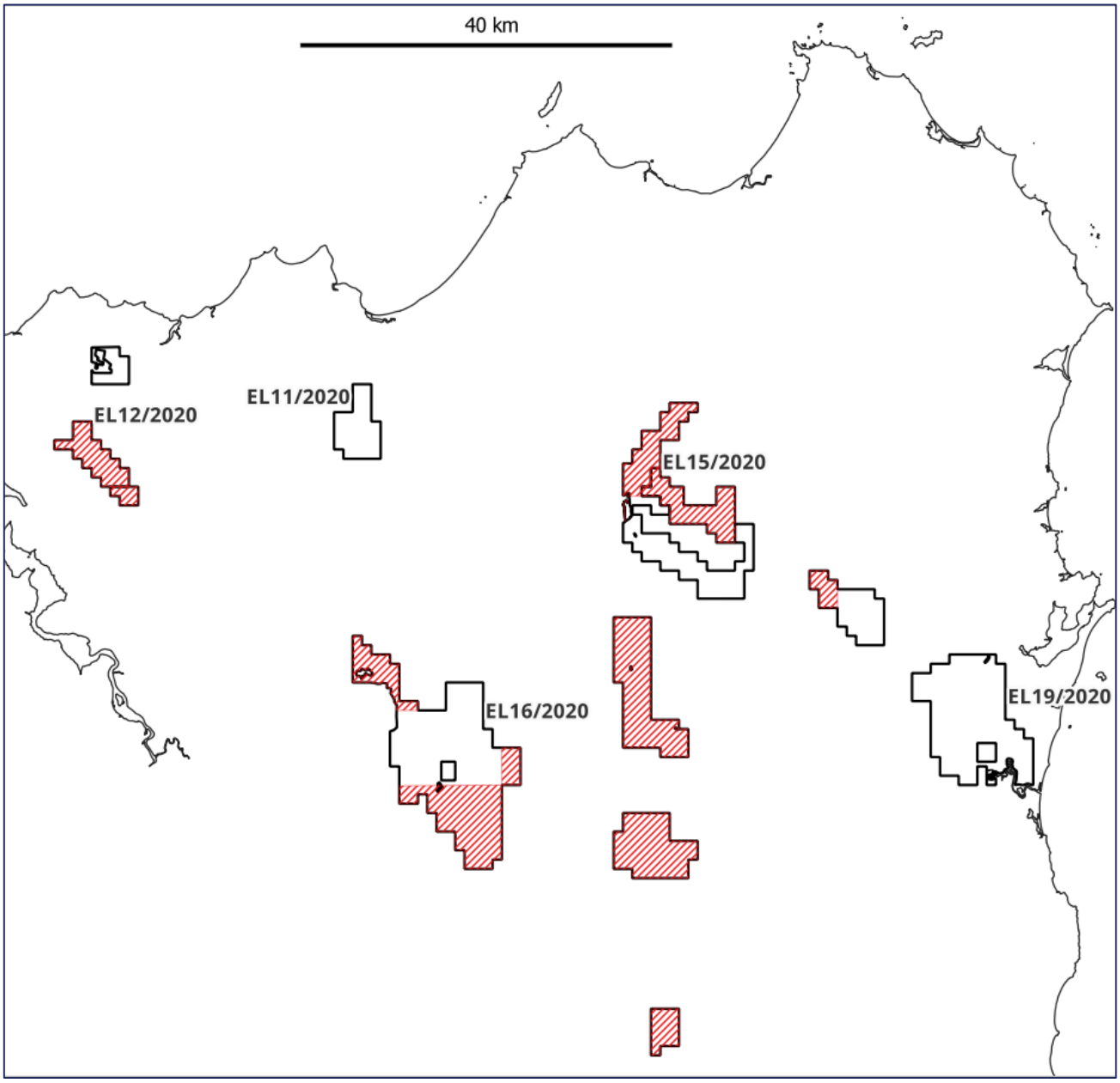


*Figure 2. 23 August 2024 Partial Surrender Applications by Tarcoola (Red hatching – surrendered areas, white – retained areas)*

## 2.2 EL 19/2020 Partial Surrenders and Consolidations

On 18 January 2024, Tarcoola's application to consolidate EL 19/2020 (Scamander), EL 2/2021 (Pyengana and Mt Durham) and EL 3/2022 (Mount Paris and Argonaut Road) into EL 19/2020 was approved by MRT. EL 19/2020 and EL 2/2021 were granted to Tarcoola on 1 March 2022, with EL 3/2022 granted to Tarcoola on 8 September 2022. EL 19/2020 initially covered an area of 239 $km^2$, EL 2/2021 an area of 195 $km^2$ and EL 3/2022 an area of 97 $km^2$. In January 2024, partial surrender applications by Tarcoola were approved for surrenders of 151 $km^2$ from EL 19/2020, 158$km^2$ from EL 2/2021 and 36 $km^2$ from EL 3/2022, with 88 $km^2$ retained from EL 19/2020, 37 $km^2$ retained from EL 2/2021 and 61 $km^2$ retained from EL 3/2022. Following the consolidation of EL 19/2020, EL 2/2021 and EL 3/2022 approved on 18 January 2024, EL 19/2020 had an area of 186 $km^2$.

On 23 August 2024 an application was made for a further partial surrender of 42 $km^2$ of EL 19/2020, with an area of 144 $km^2$ of EL 19/2020 now retained.

This Partial Surrender Report for EL 19/2020, covers work completed on the 42 $km^2$ Surrendered Area for the entire term the Surrendered Area has been held by Tarcoola (1 March 2022 to 23 August 2024).

Readers are referred to Table 3 for a list of previous reports provided by Tarcoola over EL 19/2020.

## 2.3 Exploration Licence Summary

| | |
|---|---|
| Tenement number: | EL 19/2020 Surrendered Area |
| Tenement name: | MT PARIS - PYENGANA |
| Tenement area: | 42 $km^2$ Surrendered Area |
| Tenement location: | The EL 19/2020 Surrendered Area comprises of 2 separate blocks with the northern block located approximately 2km south of Derby / approximately 2km east of Branxholm and the southern block located approximately 1km northwest of Pyengana. Main road access to the northern block is via the Mount Paris Dam Road and to the southern block is via the Tasman Highway, with numerous unsealed tracks traversing the licence area (see Figure 3). |
| Tenement land status: | Land tenure, as listed by the Department of State Growth (MRT), is listed as Private Land, permitted Timber Production Zone Land, Regional Reserve, Crown Land and Informal Land (public land). |
| 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: | 1 March 2022 to 23 August 2024. |
| Tenement holder: | Tarcoola Iron Pty Ltd., a wholly owned subsidiary of Stellar Resources Ltd. |

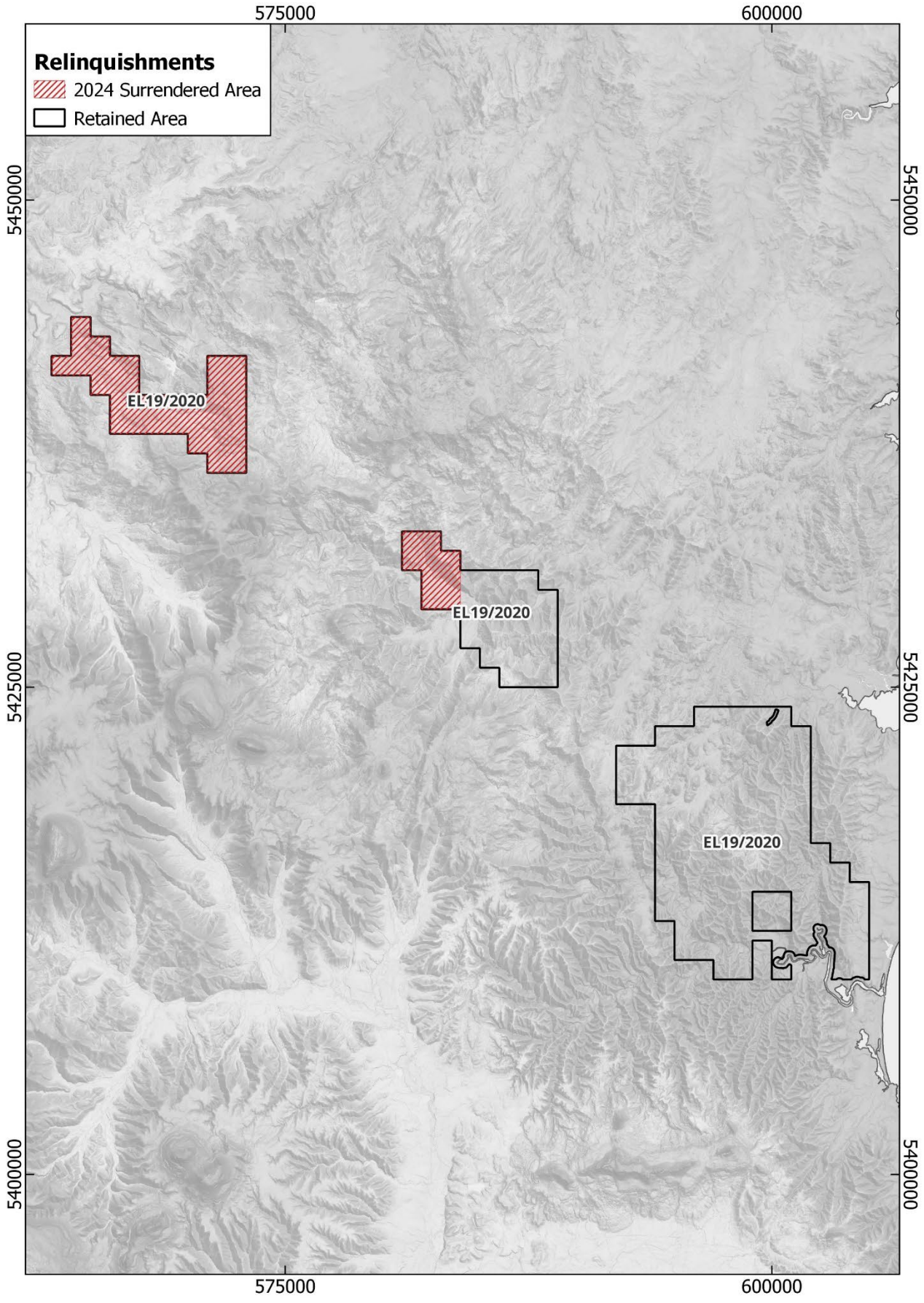


*Figure 3. EL 19/2020 Surrendered Area Location Plan*

# 3 REVIEW OF PREVIOUS WORK

## 3.1 Historic Summary

A summary of work completed on EL 19/2020 (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 19/2020*

| EL 19/2020 | | | | | |
|---|---|---|---|---|---|
| **Company** | **Year** | **Location** | **Activity** | **Comments** | **Report** |
| Utah Development Co & Other Unk | 1970s | Mt Paris Dam Block. Branxholm, Arba lead | Drilling x 9 | Sn, deep lead; PD; North Arba x & Unknown x | 82-1415, 84-2101 |
| CSR/Pacminex | 1979 | Regional | Rock chip sampling | Ag, As, Bi, Ca, Cu, Mo, Pb, Zn | 79-1407 |
| Various | 1930s to 1980s | Branxholm, Arba lead | Drilling, deep lead x 100 | Sn; Auger, PD | |
| Newmont PL | 1978 | Mt Paris South area | Drilling | Sn; Diamond; DDH3, 4, 5 & 8; NH1 | 78-1281 |
| MRT | 2007 | NE Tasmania | Aeromagnetic survey | 200m fls | |

*Table 2. Tarcoola Exploration Summary – EL 19/2020*

| EL 19/2020 Scottsdale | | | | |
|---|---|---|---|---|
| **Year** | **Location** | **Activity** | **Comments** | **Report** |
| 2020 | Tarcoola tenements | Historic geochemistry database and GIS environment. Ross Corben | Soil, stream, rock chip, drilling and min occurrences | 2021-22 |
| 2020 - 2021 | Tarcoola tenements | Reprocessing of Geophysical surveys. Phil Muir | aeromagnetic, radiometric and gravity surveys | 2021-22 |
| 2020 - 2021 | Tarcoola tenements | Initial Desktop Targeting. Gary Fietz and Tom Whiting | Identification of 50 conceptual desktop gold exploration targets | 2021-22 |
| 2021 - 2022 | Tarcoola 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 tenements | Desktop targeting and Areas of Interest study. Josh Phillips | Ongoing | 2021-22 |
| 2022 - 2023 | Mt Paris AOI (Sn-Li) | Major rock chip sampling program over neighbouring EL 19/2020, former EL17/2020 and former EL3/2022 targeting mica hosted Li-Sn mineralisation within the Mt Paris Granite A total of 166 rock chips were collected with 99 occurring over current EL 19/2020. | Returned 25 moderately anomalous lithium results >200ppm Li and >700ppm Rb (pathfinder element), with the best result returning 638ppm Li, 1,425ppm Rb, 15g/t Ag and 521ppm Sn. | EL 2/2023 2022-2023 |
| 2022 - 2023 | Mt Paris AOI (Sn-Li) | Stream sediment sampling program (21 samples) over former EL3/2022 (current EL 19/2020) targeting mica hosted | Returned only slightly anomalous lithium results with 2 results returning >150ppm Li and >500ppm Rb. 6 results returned high levels of tin with >1,000ppm | EL 2/2023 2022-23 |

| | | | | |
|---|---|---|---|---|
| | | Li-Sn mineralisation within the Mt Paris Granite | Sn, and a maximum value of 9,210ppm Sn, probably representing alluvial tin. | |
| 2022 | Pyengana gold target | Major Rockchip and Stream sediment sampling program completed within previous EL2/2021 area. | 32 rocks and 33 streams collected with no significant results for most samples. | EL2/2021 2022-23 |

# 4 EXPLORATION COMPLETED DURING REPORTING PERIOD

This section covers work completed by Tarcoola on the EL 19/2020 Surrendered Area (42 km$^2$) during the entire term the ground has been held from 1 March 2022 to 23 August 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 21 rock chip samples, zero stream sediment samples and zero soil samples were captured from company reports within the EL 19/2020 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 19/2020 Surrendered Area include:

**Mt Paris AOI (Sn-Li) – central / eastern part** - located near Branxholm and selected for occurrences of outcropping alkali Mt Paris Granite through the Sideling Sandstone which are exploration targets for mica-hosted lithium, tin, and other critical minerals. Historic rock chip data includes values >100ppm Li, with several

values ranging between 600-1400ppm Li in the Mt Paris and Lottah areas. The Mt Paris AOI (Sn-Li) is divided into three parts; a southern part within in the EL 15/2020 Retained Area where best results to date have been returned (not covered by this report), a northern part within the EL 15/2020 Surrendered area (see EL 15/2020 September 2024 Surrender Report), and a central / eastern part within the EL 19/2020 Surrendered Area.

**Pyengana (Au) northern extent** - located in the vicinity of Pyengana and selected for as an IRGS target for a tightly constrained, isolated area of hornfelsed Mathinna Group sediments, sandwiched between a series of granites and granodiorites with a ridge in the gravity data and low magnetic signature showing similarities to the Haleys New Country Granite (HNCG) considered causative pluton for the Golden Ridge-Brilliant-Trafalgar district held by Flynn Gold. Geochemically, Pyengana has almost no Au in historic stream results - similar to the lack of anomalism in streams around the outcropping mineralisation of Golden Ridge. There is one very high historic rock chip Au result in the central part of the Pyengana block. The vast majority of the Pyengana AOI (Au) is located to the south in the Retained Area of EL 19/2020 where Tarcoola have undertaken stream sediment and rock chip sampling programs returning modestly anomalous Au and pathfinder elements in some samples (not covered by this report).

## 4.5 Surface Geochemistry Programs

### 4.5.1 Mt Paris AOI (Sn-Li) central / eastern part – Surface Geochemistry Program

99 rock chip samples and 21 stream sediment samples were collected between February 2023 and May 2023 within the EL 19/2020 Surrendered Area (central / eastern part of the Mt Paris AOI (Sn-Li)) as part of a major surface geochemistry program targeting mica hosted Li-Sn mineralisation within the Mt Paris Granite on EL 19/2020 and EL 15/2020.

All rock chip samples were analysed using four acid digest-ICPMS, with Sn-W by lithium borate fusion ICPMS. All stream sediment samples were sieved to -80 mesh in the field, taken to ALS Burnie for sample preparation including coarse crushing and pulverisation, and analysed using four acid digest-ICPMS, with Sn-W by lithium borate fusion ICPMS.

Rock chip sampling results are included in **Appendix C** and shown in Figure 4.

Stream sediment sampling results are included in **Appendix D**.

### 4.5.2 Pyengana AOI (Au) northern extent

No surface geochemistry sampling was completed over the Pyengana AOI (Au) within the EL 19/2020 Surrendered Area.

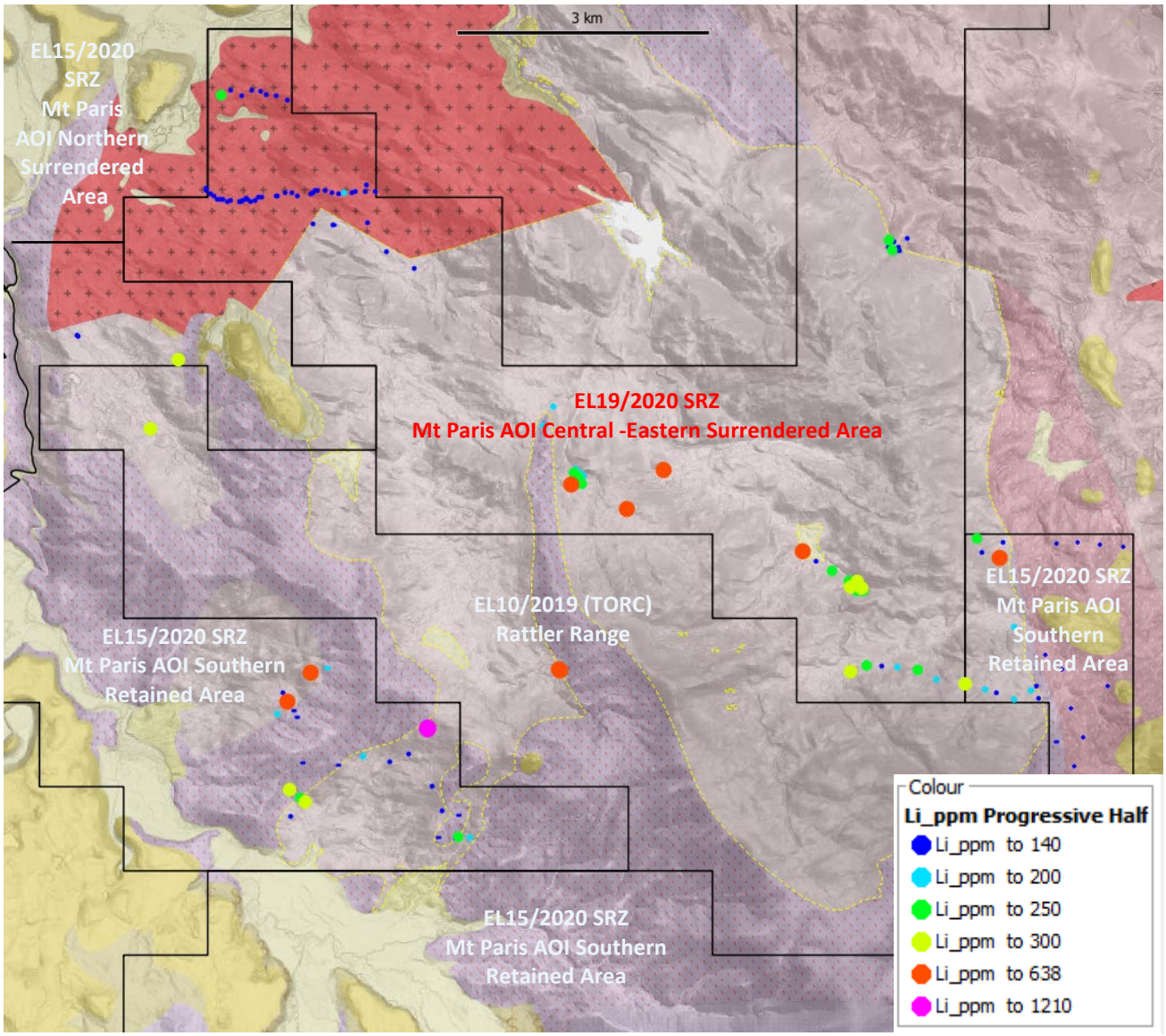


*Figure 4. Mount Paris AOI (Sn-Li) - SRZ Rockchip Results (Lithium), 25K Geology*

# 5 DISCUSSION OF RESULTS

## 5.1 Mt Paris AOI (Sn-Li) central / eastern part – Surface Geochemistry Program Results

Results of the 99 rock chip samples collected within the EL 19/2020 Surrendered Area (central / eastern part of the Mt Paris AOI (Sn-Li)) returned 25 moderately anomalous lithium results >200ppm Li and >700ppm Rb (pathfinder element), with the best result returning 638ppm Li, 1,425ppm Rb, 15g/t Ag and 521ppm Sn.

Results of the 21 stream sediment samples collected within the EL 19/2020 Surrendered Area (central / eastern part of the Mt Paris AOI (Sn-Li)) returned only slightly anomalous lithium results with 2 results returning >150ppm Li and >500ppm Rb. Six of the stream sediment results returned high levels of tin with >1,000ppm Sn, and a maximum value of 9,210ppm Sn, probably representing alluvial tin.

Although the results of Tarcoola's surface geochemistry sampling program within the EL 19/2020 Surrendered Area (central / eastern part of the Mt Paris AOI (Sn-Li)) returned elevated Li values demonstrating the potential for a greisen/mica-hosted style lithium mineralisation, no economic Li grades were returned.

# 6 CONCLUSIONS

## 6.1 Recommendations

Potential for lithium greisens in the roof zones and contact aureoles of alkali tin granites in NE Tasmania still exits, particularly on well preserved granite margins, such as on the south flank of Mt Paris. However, it will require dedicated and systematic exploration strategy to identify any such resources. Further exploration for lithium is planned by Tarcoola in the southern part of the Mt Paris target within the EL 15/2020 Retained Area where the best results to date have been obtained.

Following a review by Tarcoola in November 2023 the priority of Tarcoola's other alkalai granite lithium targets (northern part of the Mt Paris target within EL 15/2020 Surrendered Area, central / eastern part of Mt Paris target within EL 19/2020 Surrendered Area, and Rossarden target and Cokers Road target within EL 15/2020 Surrendered Area) were downgraded and a decision made to surrender these areas to reduce holding costs. Elevated levels of lithium were returned within these surrendered areas however the grades were not at economic levels. Best results obtained within the surrendered areas were in the EL 15/2020 Surrendered Area at Rossarden (best result returning 606 ppm Li, 0.86% Sn, 1g/t Ag and 1,125ppm Rb) and in the EL 19/2020 Surrendered Area at the central / eastern part of Mt Paris target (best result returning 638ppm Li, 521ppm Sn, 15g/t Ag and 1,425 ppm Rb).

The elevated lithium results within the surrendered central / eastern part of the Mt Paris Granite AOI (Sn-Li) demonstrate the potential for greisen/mica-hosted style lithium mineralisation which has not been fully tested.

# 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 19/2020 during the entire term Tarcoola has held the tenement.

*Table 3. EL 19/2020 List of Reports Provided by Tarcoola During Entire Term*

| PERIOD | TITLE | AUTHOR | APPENIDCES |
|---|---|---|---|
| 28 Feb 2022 to 27 Feb 2023 | EL 19/2020 Annual Report, Year 1, 28 February 2023 (non-public) | R. Lockley | Appendix A - Reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (P. Muir)<br><br>Appendix B - Historic Geochemistry Database (Adrian Rigg, Ross Corben)<br><br>Appendix C - Magnetic inversion modelling for areas of interest, Mitre Geophysics, 2020<br><br>Appendix D - Hylogger Spectral data, North Scamander drilling re-log 2022 |
| 28 Feb 2023 to 27 Feb 2024 | EL 19/2020 Annual Report, Year 2, 28 February 2024 (non-public) | G. Fietz, J. Phillips, R. Spencer-Llyod | Appendix A - EL19/2020 Rock Chip Results for samples collected during previous reporting period with results pending at time of previous Annual Report, MS Excel (Stellar / Geowizz)<br><br>Appendix B - EL19/2020 Stream Sediment Sample Results for samples collected during previous reporting period with results pending at time of previous Annual Report, MS Excel (Stellar / Geowizz)<br><br>Appendix C - EL19/2020 Rock Chip Results for samples collected during current reporting period, MS Excel (Stellar / Geowizz)<br><br>Appendix D - North Scamander Rock Chip Sampling and Gossan Mapping Presentation (Stellar)<br><br>Appendix E - North Scamander NSD005 Core Photographs<br><br>Appendix F - North Scamander NSD005 Drillhole Database – MS Access Database (Stellar / Geowizz)<br><br>Appendix G - North Scamander NSD005 DHEM/FLEM Survey - Scope, Proposal and Data (GAP Geophysics)<br><br>Appendix H - North Scamander NSD005 DHEM / FLEM Modelling Report and Plate .dfx Files (Mitre Geophysics) |
| 28 Feb 2022 to 27 Feb 2023 | EL 2/2021 Annual Report, Year 1, 28 February 2023 (non-public) | R. Lockley | Appendix A - Reprocessing of aeromagnetic, radiometric and gravity surveys over tenements held by Tarcoola Iron, NE Tasmania (P. Muir)<br><br>Appendix B – Historic Geochemistry Database (Adrian Rigg, Ross Corben) |

| | | | |
|---|---|---|---|
| | | | Appendix C - Tarcoola Geochemical Data EL 2/2021, .csv, Ross Corben, Geowizz Consulting. |
| 7 September 2022 to 6 September 2023 | EL 3/2022 Annual Report, Year 1, 7 September 2023 (non-public) | R. Lockley | Appendix A – Tarcoola Geochemical Data EL 3/2022, .csv, Ross Corben, Geowizz Consulting.<br><br>Appendix B – Historic Geochemistry Database (Adrian Rigg, Ross Corben) |
| 1 March 2022 to 16 January 2024 | EL 19/2020 Partial Surrender Report (151 km$^2$ 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)<br><br>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)<br><br>Appendix C -Surface Geochemistry Results – samples collected by Tarcoola. Microsoft Access database (Ross Corben, Geowiz Consulting) |
| 1 March 2022 to 8 January 2024 | EL 2/2021 Partial Surrender Report (158 km$^2$ 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)<br><br>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)<br><br>Appendix C -Surface Geochemistry Results – samples collected by Tarcoola. Microsoft Access database (Ross Corben, Geowiz Consulting) |
| 7 September 2022 to 16 January 2024 | EL 3/2022 Partial Surrender Report (36 km$^2$ 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)<br><br>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)<br><br>Appendix C -Surface Geochemistry Results – samples collected by Tarcoola. Microsoft Access database (Ross Corben, Geowiz Consulting) |

# 11 REFERENCES

See section 3.1 for references to Annual Reports covering historic exploration completed over EL 19/2020. 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 19/2020 Surrendered Area collected by GIS consultant Adrian Rigg. Microsoft Excel file. (Ross Corben, Geowiz Consulting)

Appendix C Tarcoola EL 19/2020 Rock Chip Sampling Results. Microsoft Excel file (Ross Corben, Geowiz Consulting)

Appendix D Tarcoola EL 19/2020 Stream Sediment Sampling Results. Microsoft Excel file (Ross Corben, Geowiz Consulting)