#### SCRIVEN EXPLORATION PTY LTD

Second Year Report Exploration License EL32839 Granted 6/4/2022

For the Period 6 April 2023 to 5 April 2024

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# Summary

Exploration License EL32839 was originally obtained to explore for manganese due to prior exploration and geological similarities to the Bootu Creek Mine. Literature research however, revealed that adequate drilling had been carried out and the potential for economic deposits of manganese mineralisation was low. Consequently, the potential for non-manganese mineralisation within the Exploration Lease was investigated.

Mining at the Bootu Creek Mine exposed oxide copper mineralisation within the upper Attack Creek Formation. Other zones of copper mineralisation are reported in the region including a hypogene copper occurrence in an area southwest of Banka Banka Station, possibly related to splay faults (Simpson 2000). Together, these copper occurrences indicate that the general region may be prospective for copper mineralisation, especially in the upper parts of the Attack Creek Formation.

Areas within the Exploration Llicence were identified which should have Attack Creek Formation at or the near surface. The current 1:250 000 Helen Springs Geological Map depicts a small outcrop of Attack Creek Formation in the core of a shallow anticline in the centre of the exploration license. If confirmed, this would indicate a large extent of prospective Attack Creek Formation at shallow depths.

As a result of the area's prospectivity for copper, a reinterpretation of previous electromagnetic surveys was done to identify potential copper and other sulfide mineralisation. Although the 2007 airborne EM survey is dated, its reinterpretation yielded several EM anomalies which are slated for follow up using ground geophysical surveys to locate potential copper mineralisation.

### **Location and Access**

Exploration license EL32839 is located on Helen Springs Station in the Milla Milla Paddock. Access is from the Stuart Highway and then by station tracks to the exploration license. The north south station track actual transects the prospective portion of the license. **Figure 1 and 2** show the location of the exploration license.

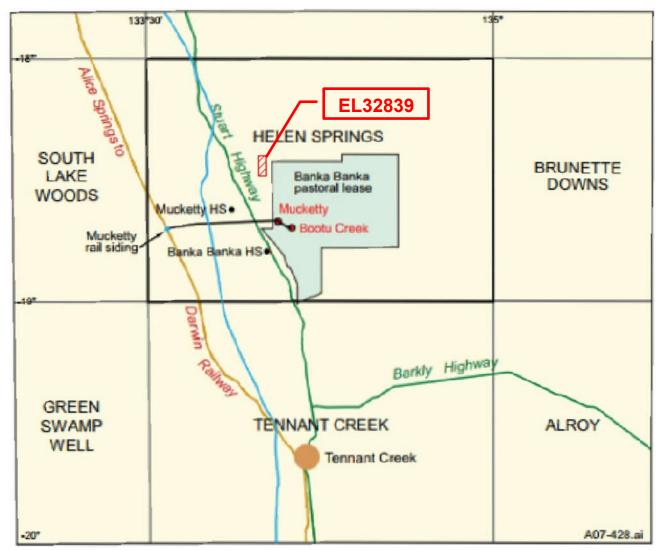


Figure 1: Location of Banka West EL32839 (modified from Scriven and Munson, 2007).

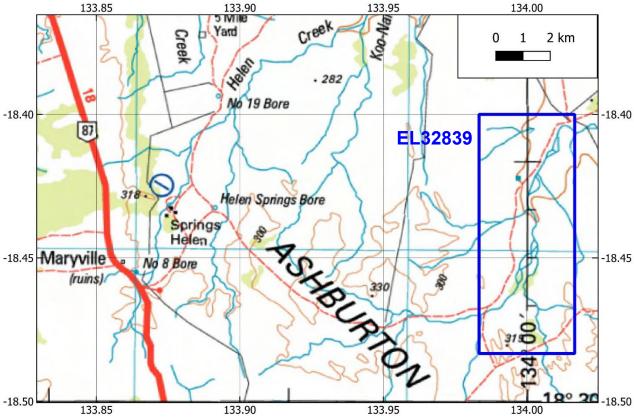


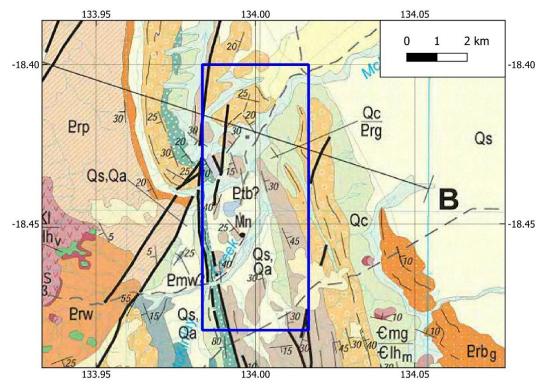
Figure 2: Location of EL32839 on a 1:250 000 topographic basemap showing the location of Renner Springs and Helen Springs.

# Geology

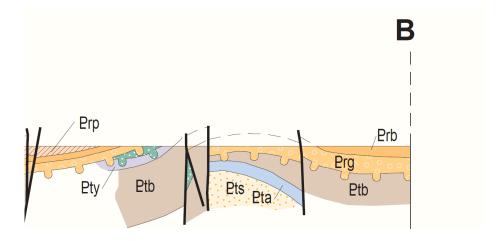
The dominant feature of EL32839 is a north-south trending anticline. A small inferred outcrop of Attack Creek Formation (Pta) forms the core of the anticline (**Figure 3 and 4**). The Bootu Formation (Ptb) is the dominant lithology on the map. However extensive drilling for manganese by OM Holdings has shown the Attack Creek Formation to be much more extensive than previously thought. There is also a dominant north-south fault system which follows the western boundary of the exploration license.

The mapped manganese mineral occurrence shown in **Figure 3** has been extensively tested and is postulated to form the core of a system which has been eroded away.

The potential for copper mineralisation, as in the type found in the Bootu Creek pit, lies in the Attack Creek Formation. The North-South trending fault system, and its associated splay faults, which occurs on the eastern boundary of the exploration license, also has potential for copper mineralisation similar to that present at Banka Banka South West (refer to Appendix 1 of Year 1 annual report for this EL).



**Figure 3**: Geology of EL32839 and surrounds as presented in the 1:250 000 Helen Springs Geological Map. Attack Creek Formation is mapped as the light blue polygon left of centre in EL32839.



**Figure 4**: Partial extract of cross section from the 1:250 000 Helen Springs Geological Map showing the section of the cross section visible in Figure 3. Attack Creek Formation (Pta) is shown as light blue and Bootu Formation (Ptb) is shown as a greyish-brown.

### **Previous Exploration**

There was no exploration to speak of prior to 2002, in the area covered by the EL, other than very broad-based sampling for diamond indicator minerals.

NTGS mapping identified manganese float adjacent to McKinlay Creek in 2002 and resulted in significant exploration, primarily for manganese (see CR2012-0379 and CR2015-0781).

Work completed included:

- Ground EM surveys, excavation, mapping and sampling of two costeans, and 12 hole RAB drill program by SEPL pre 2006/2007.
- Interpretation and report on satellite borne ASTER spectral study, 2006/07.
- Helicopter borne SkyTEM geophysical survey, Ikonos satellite imagery and 18 hole RC drill program (**Figure 4**), 2007/08.
- Aerial aeromagnetic and radiometric geophysical survey, aerial photography, 2008/09.
- 1:20,000 scale regional alteration and structural mapping and a 46 hole RC drill program (**Figure 4**), 2009/10.
- Gradient Array IP (GAIP) ground survey (1,200m x 700m) on 100m spaced east-west lines and one follow up dipole-dipole IP (DDIP) survey, 2010/2011.
- 18 hole RC drill program, 2012/2013.
- Gradient Array IP (GAIP) ground survey (1,800m x 1,500m) on 200m spaced east-west lines and 18 hole RC drill program (**Figure 4**), 2013/2014.

Two costeans excavated by Neil Scriven in 2007 exposed around 1-2m of manganiferrous gravel covered by a thin veneer of sand. Several phases of exploration drilling, EM and IP ground surveys subsequently outlined an area of low-grade manganese gravel and one small pod of manganese mineralisation located adjacent to the northern costean.

The 2011 Gradient Array IP survey identified one significant north-south anomaly, around 600 m in strike length. Closely spaced RC drilling outlined a narrow, steeply dipping moderate grade, north-south striking manganese pod extending to a depth of around 20 m. This mineralisation was interpreted as a small keel like structure, possibly the remnant of an earlier larger mineralised structure.

Tonnage potential of this manganese pod is estimated at between 5,000 to 10,000 tonnes of 20-25% Mn. Further expansion of this small pod is restricted by close spaced, adjacent drilling. It is not considered to be economic to extract.

Exploration from 2002 until 2012 consisted initially of exploration carried out by the Neil Scriven prior to the purchase of the area ex EL2349 by OM Manganese. This included reconnaissance mapping, ground EM surveys, drilling 12 RAB holes and the excavation of two costeans.

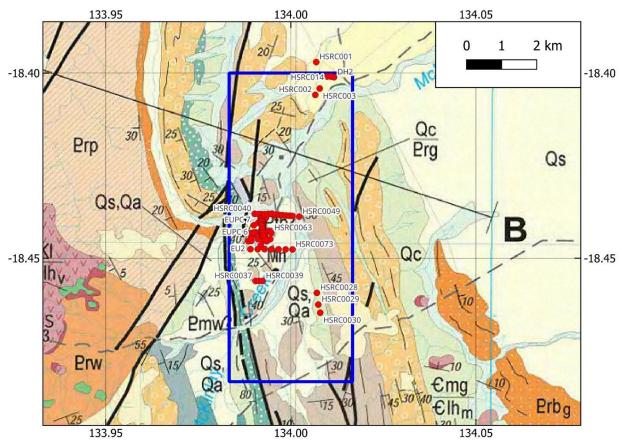


Figure 4: Geology of EL32839 showing the location of drillholes from previous exploration.

The SkyTEM airborne electromagnetic (AEM) survey was conducted by OM Manganese in 2007. The SkyTEM survey was conducted as part of OMM's manganese exploration program after the discovery of the Bootu Creek deposits. OM Manganese considered the area prospective for base metal mineralisation with historical exploration by BHP and MIM targeting HYC/McArthur River style deposits. Reports of up to 1000 tonnes of copper ore were recovered from mining manganese at Bootu Creek as oxide and copper carbonate.

The SkyTEM survey was flown at a nominal 200m line spacing with 100m infill over select areas, providing almost full coverage at the 100m line spacing within the EL32839 (**Figure 5**). The final SkyTEM results included both dB/dt X and Z component data and EMAXair conductivity inversions.

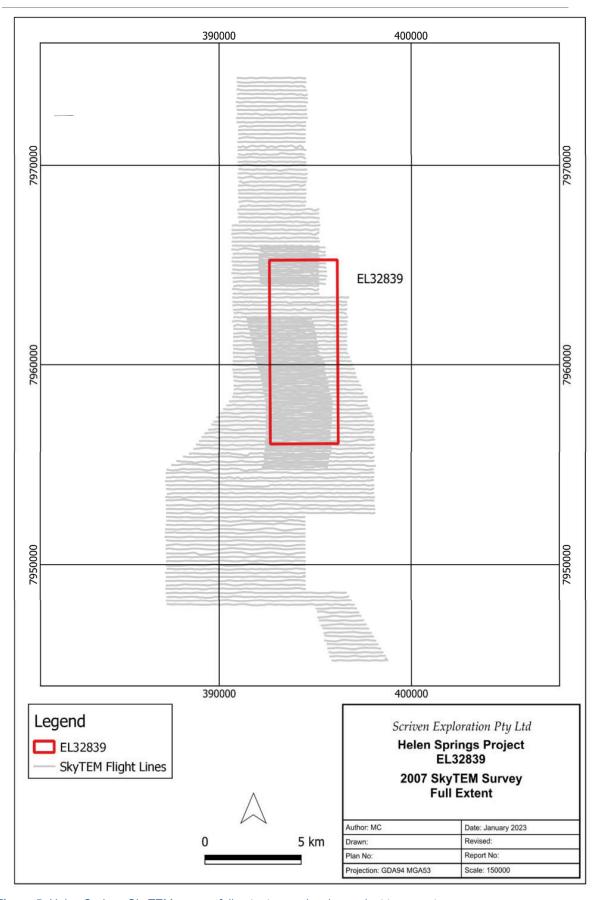


Figure 5: Helen Springs SkyTEM survey, full extent map showing project tenement area.

#### Year 1

Initial field exploration was an inspection of drill spoil of OM Manganese drill holes for possible copper mineralisation. The drill hole spoil did not present any evidence of copper mineralisation. The inspection did however highlight the shallow nature of Bootu Creek sandstone. This combined with subsequent study of the drilling logs indicated the underlying copper prospective Attack Creek Formation is much more exposed than previously thought.

A reinterpretation of SkyTEM data collected in 2007 was done with a brief to locating base metal mineralisation. Several anomalies were identified with anomalies 06, 09 and 12 interpreted as worthy of immediate follow up.

**Target HS\_AEM06** is a discrete, mid to late time anomaly located between two outcrops of Bootu Fm under cover. Evident over 400m it is best developed on line 10840. It displays a strong, discrete single peak Z channel response and cross over in the late time X channels and corresponds to a highly conductive but shallow EMAXair anomaly with a subtle extension to depth. As it is located in a favourable location it has been assigned a high priority, however due to its profile and EMAXair response it is potentially a regolith response.

**Target HS\_AEM09** is a broad, mid to late time anomaly located under cover, close to outcrops of Bootu Fm. It displays a broad single peak Z channel response and cross over in the late time X channels which is best developed on line 10620. The response suggests a regolith conductor which is confirmed in the EMAXair conductivity section. As it is positioned in a favourable location it has been assigned a medium priority.

**Target HS\_AEM12** is a strong, mid to late time anomaly located under cover, between outcrops of Bootu Fm. It displays a well developed broad, single peak Z channel response and strong cross over in the late time X channels which is best developed on line 10560. The EMAXair conductivity section highlights a thick/deep surficial conductor, with a subtle extension at depth. It is likely a response from conductive overburden, however as one of the strongest conductors in the project tenement and being positioned in a favourable location it has been assigned a high priority.

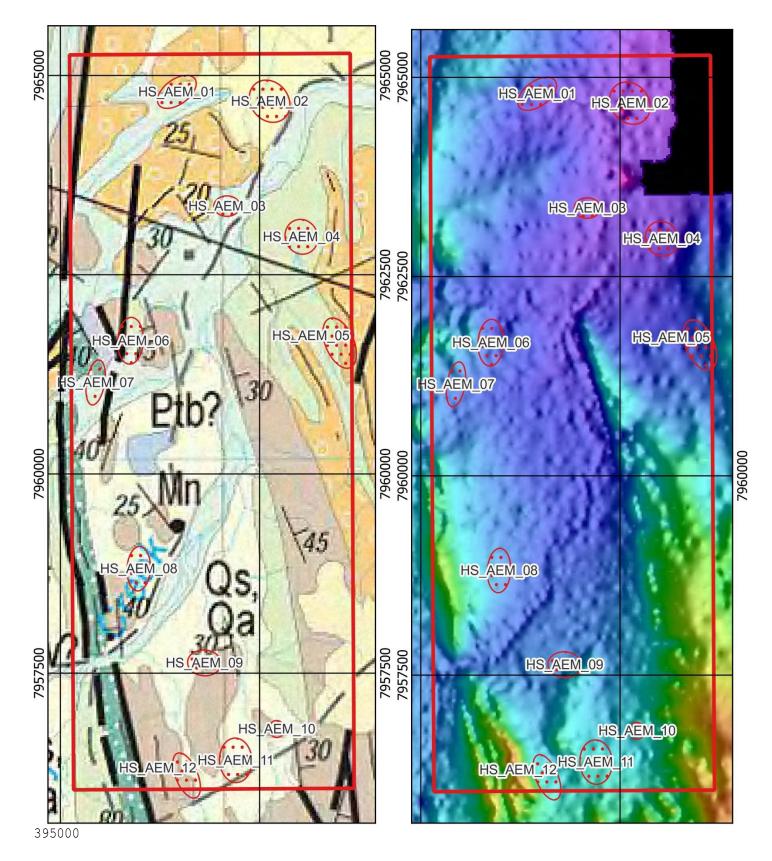
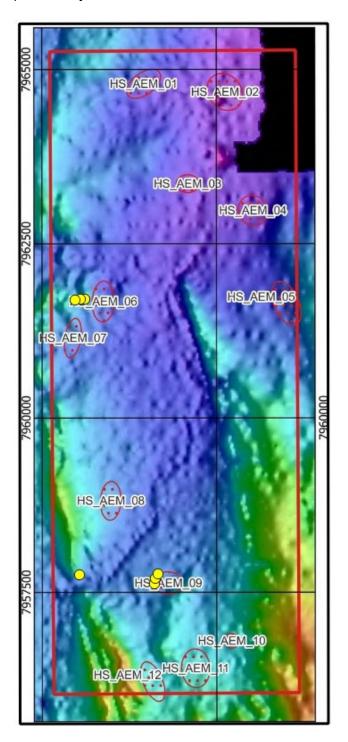


Figure 6: Location of Anomalies detected during reinterpretation of SkyTEM data.

Left: over 250K Geology, Right: over Digital Elevation Model

# Year 2

Seven soil samples were collected during field work around the anomalies identified in the previous year, **FIG.7** and **Table 1**. The results are presented in Appendix 1.



**Figure 7**: Location of soil samples with respect to the anomalies detected during the previous year's reinterpretation of SkyTEM data. Plotted as yellow dots over digital elevation image.

Sample ID	Target
RS072-RS074	HS_AEM_06
RR076, RR077, RS078	HS_AEM_09
RR075	Outcrop in creek with possible carbonate vesicles

Table 1: Details of soil sampling.

# Proposed exploration for Year 3

Exploration to be carried out in the 24/25 field season to include:

- Detailed ground check of AEM anomalies.
- Follow up geochemical sampling of AEM anomalies.
- Ground geophysical survey. (Note: dependent on a suitable EM geophysical method being used in the general area)

### References

Scriven,N and Munson,T. 2007 Manganese in the sand and spinifex, Bootu Creek area, Northern Territory. Proceedings of the Central Australian Basins Symposium (CABS) Alice Springs, Northern Territory, 16–18 August, 2005. Volume: Northern Territory Geological Survey, Special Publication.

Appendix 1: Results of soil sampling survey

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H0002, Version, 4,,,,,,,,,,,
H0003, Date generated, 16/05/2024, , , , , , , , , , ,
H0004, Reporting period end date, 6/04/2024,,,,,,,,,,,,
H0005, State, NT, , , , , , , , , ,
H0100, Tenement no/Combind report no, EL 23839,,,,,,,,,,,
H0101, Tenement_holder, Scriven Exploration, , , , , , , , , ,
H0102, Project name, , , , , , , , , , ,
H0150,250K map sheet number, SE5310,,,,,,,,,,
H0151,100K map sheet number,5660,,,,,,,,,,,
H0200, Start date of data acquisition, 6/04/2023,,,,,,,,,,,,
H0201, End date of data acquisition, 5/04/2024,,,,,,,,,,,
H0202, Data format, DG4,,,,,,,,,,
H0203, Number of data records, 1, , , , , , , , , ,
H0204, Date_of_metadata_update, 16/05/2024,,,,,,,,,,,,
H0300, Related_data_file, NA,,,,,,,,,,,
H0301, Location data file, NA,,,,,,,,,,,,
H0302, Lithology_data_file, NA,,,,,,,,,,,
H0303, Assay data file, NA,,,,,,,,,,,
H0304, Survey data file, NA,,,,,,,,,,,
H0305, SurfGeochem Data File, NA,,,,,,,,,,,
H0307, Lithology code file, NA,,,,,,,,,,,
H0308, File verification List, NA,,,,,,,,,,
H0500, Feature_located, Soil sample location, , , , , , , , , , ,
H0501, Geodetic datum, GDA94,,,,,,,,,,,,
H0502, Vertical datum, AHD, , , , , , , , ,
H0503, Projection, MGA, , , , , , , , , , ,
H0530, Coordinate system, Projected, , , , , , , , , , , , , ,
H0531, Projection_zone, 53,,,,,,,,,,,
H0532, Surface Location Survey Instrument, Handheld GPS,,,,,,,,,,,
H0533, Surface Location Survey_Company, Scriven Exploration,,,,,,,,,,
H0600, Sample Code, SOIL, , , , , , , , , , ,
H0601, Sample Type, SOIL, , , , , , , , , ,
H0602, Sample description, NA,,,,,,,,,,
H0700, Sample Prep Code, NA,,,,,,,,,,,
H0701, Sample Prep Desc, Crush and pulverise to passing 75um,,,,,,,,,,
H0702, Job no, NA 26488, , , , , , , , , ,
H0800, Assay code, FALL, G4001, , , , , , , , ,
H0801, Assay company, North Australian Assay Laboratory,,,,,,,,,,,
H0802, Assay description, FALL, 25g Low Level Fire-assay with ICP with mass
spectrometer finish, G400I, "Hydrochloric, Nitric, Perchloric and
Hydrofluoric acids digest in Teflon Tubes. Leach residue digested with
Hydrochloric acid. Reported elements analysed by Inductively Coupled
Plasma Optical Emission Spectrometry (ICP-OES)",,,,,,,,
H0900, Remarks, """Below detection assay indicated by L""", , , , , , , , , , ,
H1000, SampId, MGA Easting, MGA Northing, Sample type, Sample
comment, Au, Cu, Pb, Zn, Ag, As, Ni, Co, Fe, Mn
H1002,,,,,,FALL,G400I,G400I,G400I,G400I,G400I,G400I,G400I,G400I,G400I
H1003,,,,,1,1,5,2,1,10,2,2,20,1
D,RS072 ,393311,7961495,SOIL,()-80# sandy silt AEM6 break in slope Helen
Springs, 1.4, 8, 14, 14, L, L, 10, 8, 18918, 116
D,RS073,393244,7961495,SOIL,()-80# s/st scree silty
sand, 1.4, 9, 14, 17, L, L, 12, 10, 18362, 292
D,RS074,393180,7961485,SOIL,ditto,1.6,13,15,22,L,L,14,11,20466,349
D,RR075,393252,7957675,SOIL,"Outcrop in creek, ?carbonate
vesicles", 1.3, 11, 5, 19, L, 16, 11, 2, 13514, 127
D,RR076,394250,7957553,SOIL,()-80# AEM9 break in slope
silt, 3.4, 14, 14, 16, L, L, 13, 9, 19586, 204
```

D,RR077,394267,7957621,SOIL,ditto,2.3,17,17,22,L,L,16,11,25703,237 D,RS078,394300,7957691,SOIL,ditto,2.6,14,14,20,L,L,16,12,22966,157 EOF,,,,,,,,,