



OM Manganese Ltd

Title holder (s): OM (Manganese) Ltd (100%)
Operator: As above
Tenement Manager: Bichard Exploration Administration Services Pty Ltd

EL23459 Renner Springs Project

Annual report for EL23459 for period 4th March 2008 to 3rd March 2009 (Year 6)

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Abstract

Exploration licence EL23459 was granted to Neil Henry Scriven on March 4th, 2003 and comprised 95.3 km² and subsequently reduced to its current 84.5 km² (29 sub-blocks). The tenement was acquired from Mr Scriven by OM Manganese) Ltd in late 2007 with title being transferred to OM (Manganese) Ltd in March 2008.

The area has several occurrences of manganese mineralisation within its boundaries discovered during intensive base metal mineralisation during the 1980's. Subsequent exploration on EL23459 focussed on the early discoveries with a modest drilling program and ground EM surveys conducted by Neil Scriven.

A clearance and subsequent AAPA authorisation certificate covering the areas prospective for manganese was issued in 2006.

In year 5, OM (Manganese) Ltd conducted a review of hyperspectral satellite data, an extensive helicopter-borne SkyTEM survey, excavation and sampling of a costean and clearing of selected drill sections.

Work completed in the reporting period included: acquisition of high resolution (0.6m), RGB "Quickbird" satellite imagery over the project area; an RC drilling program comprising 17 holes for a cumulative total of 1242 metres and 595 samples being assayed; an east-west oriented aerial geophysical survey, totalling approximately 532 line kilometres and collecting both aeromagnetic and radiometric data at a nominal flight height of 50 metres and line spacing of 150 metres, and; advanced reprocessing of 2007-2008 SkyTEM data using Vector Research's "Target TEM" algorithms.

Significant mineralization was intersected in three holes with the best intersection being five metres of manganese averaging 33.3% from 72 metres depth. The aeromagnetic and radiometric geophysical data sets were subject to advanced reprocessing at the anniversary date of the exploration licence.

A waiver for reduction was approved on 29/09/2008 and a renewal application was lodged on 09/12/2008.

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Electronic file list

File Name	File type	Content
EL23459_200903_01_report.pdf	pdf	This report
EL23459_200903_02_collars.txt	Tab del txt	Drill hole collars location data
EL23459_200903_03_assays.txt	Tab del txt	Sample assay results
EL23459_200903_04_geol_logs.txt	Tab del txt	Down hole geology logs
EL23459_200903_05_DHsurvey.txt	Tab del txt	Down hole survey data
EL23459_200903_06_logging_codes.pdf	pdf	OMM geology logging codes
EL23459_200903_07_QB.ecw	ecw	Image data file
EL23459_200903_07_QB.ers	ers	Image header file
EL23459_200903_07_QB.tab	Mapinfo tab	Mapinfo table file
EL23459_200903_08_Figure3.pdf	pdf	Drill hole location map
EL23459_200903_09_mag_rad_nth.dat	Data file	2008 Aerial Geophysical data Nth area
EL23459_200903_09_mag_rad_nth.des	Definition file	
EL23459_200903_09_mag_rad_nth.dfn	Description file	
EL23459_200903_10_mag_rad_sth.dat	Data file	2008 Aerial Geophysical data Sth area
EL23459_200903_10_mag_rad_sth.des	Definition file	
EL23459_200903_10_mag_rad_sth.dfn	Description file	

1 Introduction

Exploration licence EL23459 was granted to Neil Henry Scriven on the 4th of March 2003. The original grant area of EL23459 in 2003 was 95.3 sq km has since been reduced to the current area of 84.5 km (29 blocks). The licence was purchased from Mr Scriven in late 2007 and the title transferred to OM (Manganese) Ltd (OMM) in early 2008. After a presentation to the Titles Division of DRDPFR, a waiver for reduction was approved on 29/09/2008 and a renewal application was lodged on 09/12/2008.

The licence is located approximately 10 kilometres south west of Renner Springs Roadhouse. The roadhouse is located approximately 160 kilometres north of Tennant Creek. Figure 1 shows the location of the licence in relation to the Bootu Creek manganese mine.

The western boundary of the exploration licence is approximately 20 km east of the Alice Springs-Darwin railway. Access to the exploration licence from the Stuart Highway is by a rough station track in the north and by a serviced dirt road designed to maintain the natural gas pipeline in the south. A north south road traverses the centre of the exploration licence commencing on the east west natural gas service road.

The physiography of the exploration licence consists of hilly terrain in the central east of the exploration licence, of which the highest point is Mount Willieray (361m). Several incised creeks head west across the exploration licence before dissipating into the sand covered plains commencing in the west of the exploration licence.

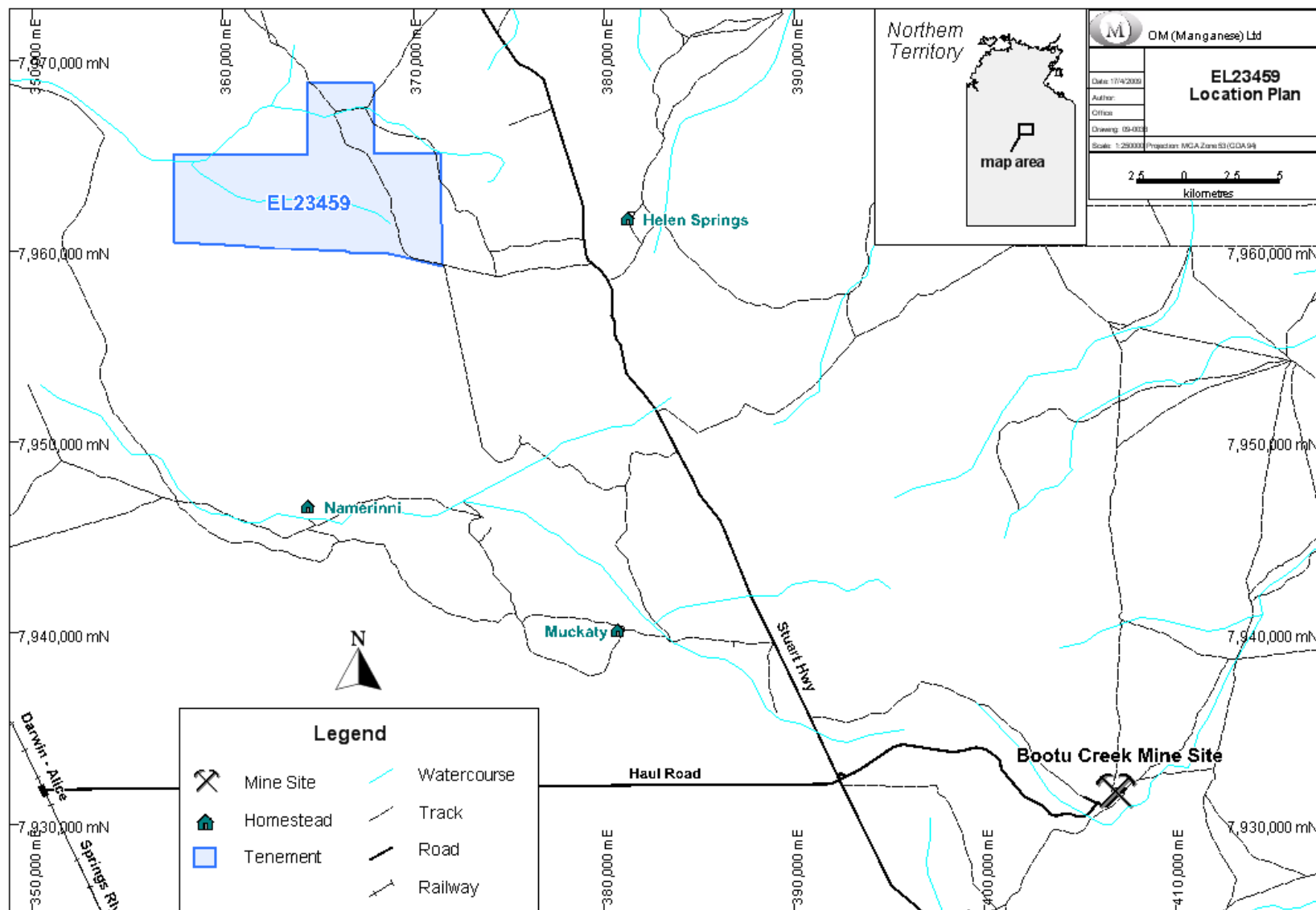


Figure 1 Plan showing the location of EL23459 in relation to Bootu Creek mine site and local Stations.

2 Previous Exploration Activity

2.1 Exploration Activity 2003/2004

Exploration carried in the 2003/04 by Neil Scriven consisted of:

- Literature research which located manganese occurrences previously mapped on the exploration licence and field inspection to locate those manganese occurrences.
- EM survey of known manganese occurrences using an EM31 instrument

2.2 Exploration Activity 2004/2005

Exploration carried out in 2004/05 by Neil Scriven consisted of:

- Locating an isolated manganese occurrence first identified in mapping by Keystone Resources in the 1980's.
- EM34 survey of the area around 1980's percussion hole W38. A further survey planned for the manganese occurrences in the north of the exploration licence was abandoned due to mechanical failure.
- Percussion drilling carried out in the vicinity of manganese occurrences located in the north of the exploration licence.

2.3 Exploration Activity 2005/2006

Exploration activities in 2005/06 by Neil Scriven consisted of an

- e34 program which essentially joined the manganese outcrops in the north of the licence to the drill hole which encountered economic manganese mineralisation in the south (W38).
- Reconnaissance was also carried out in the central eastern portion of the licence to try to locate barium rich cherts located in the 1980's. Traverses of area failed to locate the cherts.

Three areas of interest were outlined by the ground EM survey based on the criteria of moderate to strongly anomalous vertical and horizontal readings together with moderate to strongly anomalous difference and edge effects.

- a) An area in the Carruthers/Bourke dome underlain by non outcropping Bootu Creek Formation, based on NTGS regional mapping. The area is located on the western side of 7966680N.
- b) An area to the east of line 7965500N shows anomalous readings in the vertical (shallow) mode and also has a good edge effect.
- c) The area around drill hole W38, which was drilled in the 1980's and intersected significant manganese mineralisation at depth.

2.4 Exploration Activity 2006/2007

Exploration activity in 2006/07 consisted of

- a follow up e31 electro magnetic survey of the target areas identified by the e34 electro magnetic survey conducted in 2005/06
- the clearance and subsequent issue in late 2006 of an AAPA authorisation certificate covering the areas prospective for manganese.

The EM anomalies found on both lines 7966680N and 7965480N could be attributed to the same stratigraphic boundary in the Carruthers dome. Both EM anomalies are shallow and are in areas which are devoid of vegetation.

The third area followed up using the e31 instrument was the area around former drill hole W48. The traverses resulted in high readings in several of the traverses indicating a shallow conductor. Significantly in the vicinity of drill hole W48 the readings are offset from the hole and may indicate it was drilled in the wrong place.

Extrapolation of the anomalous readings in order to correlate the anomalous readings with manganese mineralisation located in W38 300 metres to the east gave the following conclusion.

- a) The strike of the EM anomaly through the traverses is 035°.
- b) The strike approximately lines up with an e34 anomaly on line 29 consisting of adjacent high/low 100/40 reading in the vertical plane. The high low readings can indicate shallow manganese mineralisation.
- c) If the possible shallow manganese mineralisation is further projected to be located opposite the Mn mineralised drill hole W38 then a dip of 25 - 30° for the manganese mineralisation is predicted.

2.5 Exploration Activity 2007/2008

The exploration program for year 5 included:

- The excavation and sampling of a costean,
- clearing of selected drill sections,
- a review of satellite imagery,
- an extensive helicopter-borne SkyTEM survey.

2.5.1 Costean Excavation and Clearing

A single costean was excavated by Neil Scriven through a low lying outcrop at located at 7967880N-365050E and near the northern boundary of the EL.

North and south wall sketches of the costean (see Figure 3) and assay results from wall sampling follow. The orientation of the manganese mineralisation is not conclusively defined by the costean, but appears to be dipping shallowly to the east.

Access tracks and drill pads for follow up drilling required for structural orientation and to quantify the width and grade of the mineralisation encountered near the costean and around W38RDH was completed following excavation of the costean. Satellite Imagery

The satellite imagery was reviewed by Amit Eliyahu in conjunction with the adjacent OMM Renner Springs exploration licences and is reported in detail in the Renner Springs Project report for 2006/07 for EL9975, EL9998 and EL23624. The imagery is based on ASTER satellite data purchased by OMM.

2.5.2 SkyTEM Survey

The helicopter-borne SkyTEM survey was conducted by GeoForce Pty Ltd and results were interpreted by Southern Geoscience Consultants. The SkyTEM survey was flown in December 2007 as part of a regional program covering the entire Renner Springs project area including EL9975, EL9998, EL23459 and EL23624 and together with the Helen Springs project area covering EL23495, EL23698 and EL24052.

Flight lines covering EL23459 totalled around 24% of the total 2,300 line kilometre survey. Flight lines were flown east-west on 200 metre spaced lines and in filled to 100m on selected anomalies

Initial results outline the stratigraphy and major structural features but remain ambiguous with regards to outlining the known manganese mineralisation in the vicinity of the recent costean at the north end of the EL and around W38RDH (drilled by Keys Resources) which intersected 9m @ 36.7% Mn from 63m.

3 2008-2009 Exploration Activity

Exploration activities conducted during the past year included:

- acquisition of high resolution satellite imagery over the project area
- an RC drilling program
- an aerial geophysical survey.
- Reprocessing of SkyTEM data collected in year 5.

3.1 Quickbird Satellite Imagery Acquisition

With an aim of a/ locating existing tracks and accesses, and b/ searching for obvious manganiferous outcrop, archival (2005 & 2007 vintage), high resolution, RGB satellite imagery was purchased from Geoimage Pty Ltd. The imagery cell size is 0.6m², and was supplied in GDA94 MGAZ53 using system corrected orthorectification (no ground control points). The ECW file is supplied as file EL23459_200903_07_QB.ecw while the ers and mapinfo tab files bear the same name with .ers and .tab file extensions. The extent of the image is shown in Figure 2.

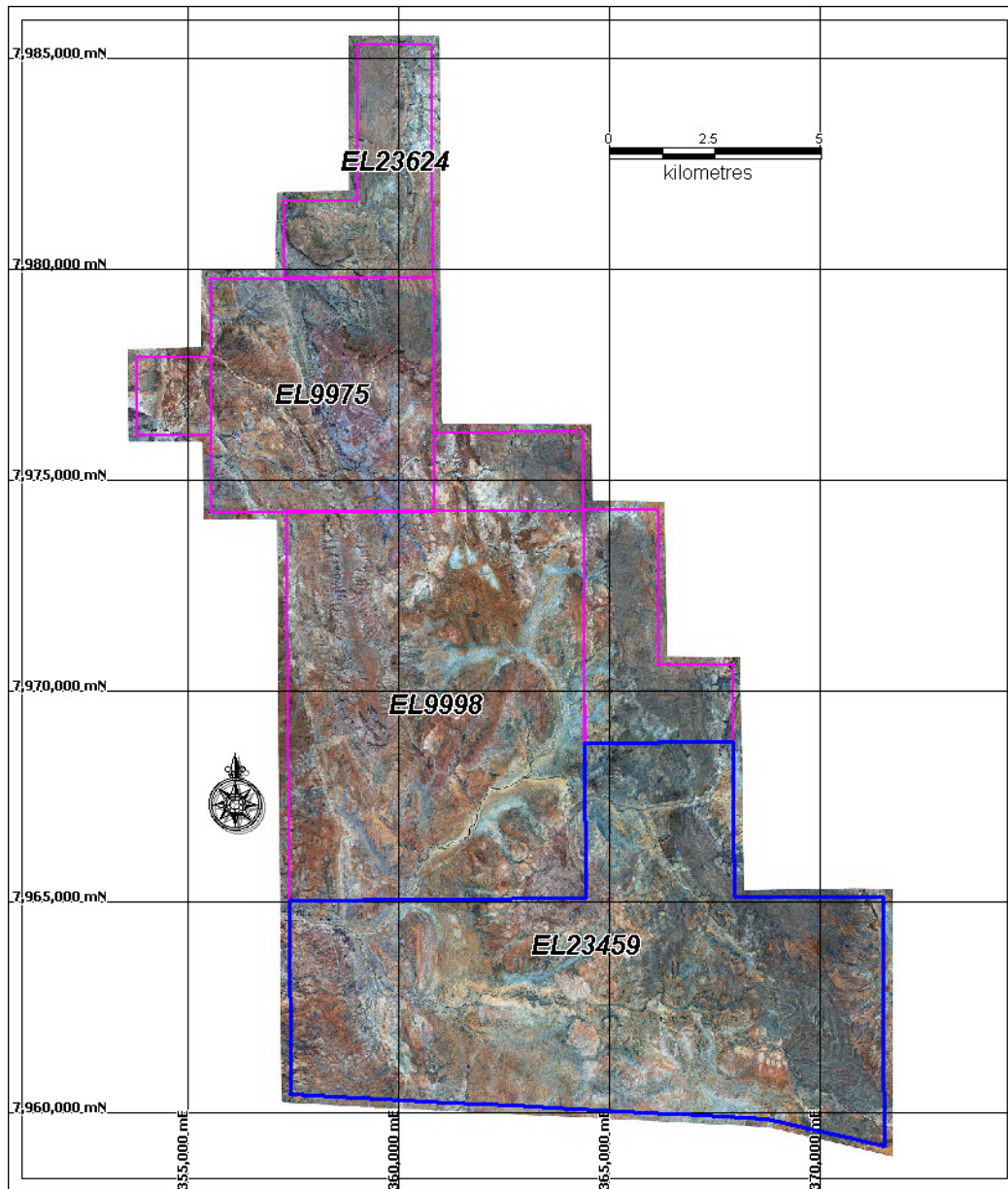


Figure 2. Map showing the areal extent of the Quickbird satellite image in relation to EL23459 and other tenements comprising the Renner Springs Project area.

3.2 RC Drilling Program

McKay Drilling from Kalgoorlie was contracted to perform drilling within EL23459 in 2008. The drilling contractor used a Schramm T650WS rig with a towed dust suppression trailer mounting a cone splitter producing an approximate 25% split sample. The rig was accompanied by a truck mounted auxiliary compressor and a second truck with drill-rod handling facilities on-board. The rig drilled a 5¼" hole.

A total of 17 holes, as shown in Figure 3, were drilled to various depths. Holes targeted three known manganese occurrences, namely:

- The costean excavated during the 2007/2008 field season (6 holes)

- A small outcrop of manganese at 367926mE 7964295mN (2 holes)
- The Key Resources DDH, W38 (9 holes)

3.2.1 Costean

Two short traverses were drilled in an east west direction adjacent to the site of the costean. The collars of the vertical holes were spaced at 40 metre centres and were drilled to depths of up to 60 metres. Apart from patchy, low-grade mineralization discovered near surface, i.e. at the same location as seen in the walls of the costean, no significant mineralization was discovered.

3.2.2 Outcrop

A small outcrop of manganese occurs 1.43km NW of the Key Resources hole W38. Two holes were drill immediately adjacent to this outcrop. The path of the inclined holes are east-west and cross their below traces below outcrop (scissor-holes). No mineralization was found below the outcrop.

3.2.3 W38

Two short, east-west traverses of vertical holes were drilled 25 metres north and 25 metres south of the historical diamond drill hole. The northern traverse intersected very low-grade manganese at depths of approximately 55 metres and 79 metres. The southern traverse produced more favourable results with three of the five holes intersecting >20% Mn. Only a single hole, RSRC0049, contained manganese of notable thickness with 5m @33.3% Mn from 72 metres. Manganese occurrences in the adjacent holes were used to infer a shallow dip of approximately 20 degrees to the west. No anomalous base metals were detected in the assay results of any of the samples collect during the drilling program.

Refer to e-document EL23459_200903_08_Figure3.pdf

Figure 3. Plan showing the relative location of RC collars for holes drilled in the 2008/2009 exploration field season.

3.3 Aerial Geophysical Survey

GPX Geophysical Exploration Services were contracted to acquire both radiometric and aeromagnetic data across all of OMM's tenement holdings. The total survey parameters are shown in Table 1.

Type of Data	Aeromagnetics and Radiometrics
Survey datum	GDA94, MGA Zone 53
Survey line spacing	150 metres
Survey line direction	090-270 degrees
Tie line spacing	1,500 metres
Tie line direction	0-180 degrees
Mean terrain clearance	53 metres
Survey distance	10,605 km
Survey Date	October 2008
Survey by	GPX Geophysical Exploration Services
Job No.	2356
Survey commissioned by	OM (Manganese) Limited

Table 1. OMM 2008 Geophysical survey parameters

The total survey area was divided into two sections covering the grouped tenement holdings. The location of the survey areas is shown in Figure 4.

The supplied gridded imagery of the magnetic data shows very little detail in the TMI, 1VD or 1VD RTP datasets. As a consequence the data was sent for reprocessing using Vector Research's (a Perth-based geophysical consultancy) TargetMap software in early March 2009. The reprocessed data was not available at the end of the reporting period.

The radiometric data shows that the exploration licence is dominated by rocks containing significantly elevated potassium count. Detailed mapping of the licence is planned for April/May 2009 and this work will identify the rock-type responsible for the signature.

3.4 Reprocessing of 2007/2008 SkyTEM data.

The data collected during the previous reporting period produced gridded images showing the licence dominated by EM conductor which is coincident with the potassium signature observed in the radiometric data as mentioned above. Beyond that observation the image is quite noisy and so, in late February 2009, all of OMM's EM datasets were sent to Vector Research for reprocessing using the TargetTEM algorithms. The data had just been returned to OMM's exploration team at the time of writing this report so no intelligent interpretation had been made. The review will be covered in the following year's report.

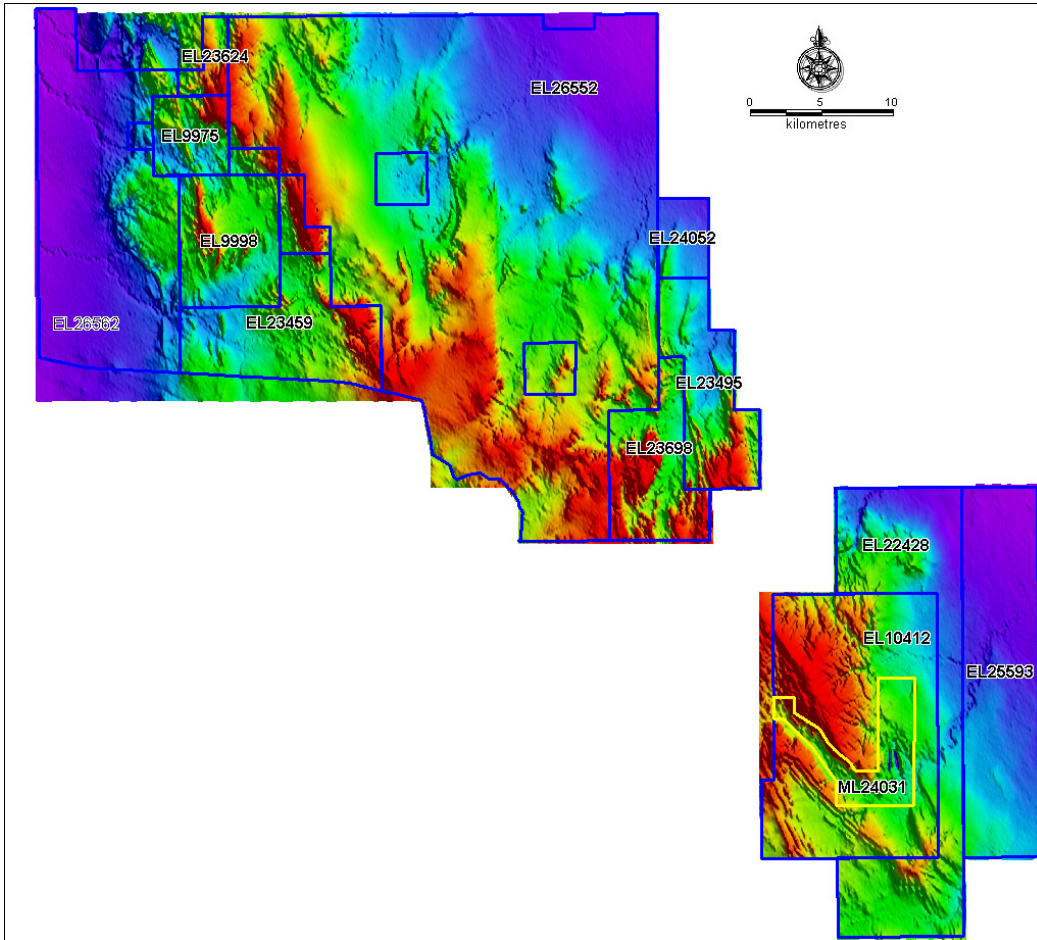


Figure 4. Map showing the extent of the 2008 aerial geophysical survey over all OMM tenements holding in the Bootu Creek, Helen Springs and Renner Springs Project areas. The Bootu Creek mine is located in ML24031, the yellow coloured polygon in the southeast portion of the image. The pseudocoloured image represents the DTM collected during the survey.

4 Exploration Program Expenditure Summary

4.1 Exploration Expenditure Incurred Year 6 (2008/09)

RC Drilling and sampling	\$108,025
Aerial geophysical survey (GPX Surveys)	\$ 8,500
Geological Supervision and Field Expenses	\$ 6,000
GIS data preparation/management	\$ 1,876
Reprocessing of SkyTEM data by Vector Research	\$ 2,026
Quickbird Satellite imagery acquisition	\$ 650
Tenement Administration	<u>\$ 325</u>
Total Expenditure	\$127,402
Covenant	\$ 60,000

4.2 Planned Exploration Program for Year 7 (2009/10)

The proposed exploration program for 2008/09 includes

- Reprocessing of recently acquired (late 2008) geophysical data using Vector Research's 'TargetMap' software
- Interpretation/review of reprocessed aeromagnetic and radiometric geophysical data.
- Detailed outcrop mapping (including capture of high-resolution aerial photo's)
- RC drilling of geophysical and other targets as generated by mapping and data review

4.3 Planned Exploration Expenditure Year 7 (2009/10)

Reprocessing of Aeromagnetic and radiometric data	\$ 3,000
Interpretation of reprocessed geophysical data	\$ 6,000
Detailed mapping (including capture of air photo's)	\$ 16,500
Drill site preparation	\$ 1,500
RC drilling (900m)	\$ 40,500
Assay (225)	\$ 6,000
Geological supervision and logging	\$ 8,500
Field Expenses	\$ 2,500
Tenement Admin	<u>\$ 500</u>
Total Planned Expenditure (Year 7)	\$ 85,000