

Bootu Creek Manganese Project

EL22428

Partial Surrender Report

For the Period

4th Sept. 2002 - 3rd Sept. 2010

Compiled By:

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Electronic file list

File Name	File type	Content
EL22428_2010_P_01_report.pdf	pdf	This report
EL22428_2010_S_collars.txt	Tab del txt	Drill hole collars location data
EL22428_2010_Sassays.txt	Tab del txt	Sample assay results
EL22428_2010_S_geol_logs.txt	Tab del txt	Down hole geology logs
EL22428_2010_S_DHsurvey.txt	Tab del txt	Down hole survey data
EL22428_2010_S_logging_codes.pdf	pdf	OMM geology logging codes
Appendix 1 – ASTER_Bootu (Spectral data)	ecw	MapInfo compatible image file
Appendix 2 – Bootu Creek Quickbird	ecw	MapInfo compatible image file
Appendix 3 – GPX Bootu Creek South (Mag & Rad)	ecw	MapInfo compatible image file
Appendix 3 –Bootu Creek Orthophoto 2009	ecw	MapInfo compatible image file

1. Exploration Licence Details

Original Grant EL22428 04/09/2002 45 blocks

EL22428 was initially granted for a period of 6 years, then renewed for a further 2 years without reduction in 2008. A further 2 year renewal was applied for in June 2010 and included a reduction of 16 blocks.

Partial Surrender EL22428 03/06/2010 16 blocks

A letter was forwarded to the Director of Titles requesting the surrender of 16 blocks (with 29 blocks to be retained) on 02/06/2010. The area surrendered is from the northern extents of the Exploration Licence and is shown in Figure 1.

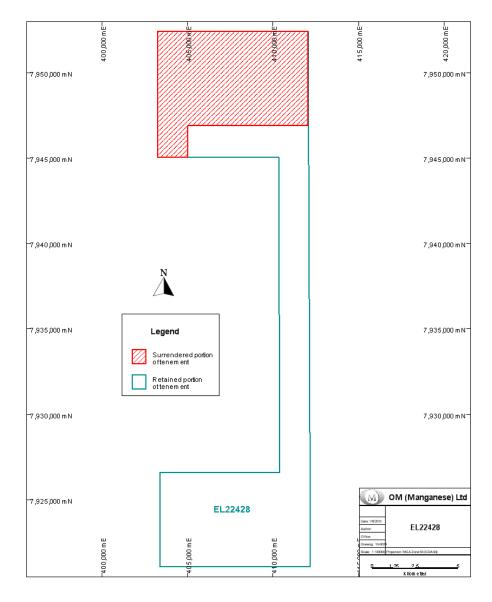


Figure 1. Plan of area partially surrendered and that retained.

2. Location

HELEN SPRINGS 1:250,000 SE 53-10 BRUNCHILLY 1:100,000 5760

The EL is located 130km north of Tennant Creek and partially surrounds EL10412 (which in turn encloses the Bootu Creek Mining Operation located on ML24031) to the north, east and south. See Figure 2.

Access is via the private haul-road which joins the Bootu Creek Mine site with the Mucketty rail siding. The haul-road passes under the Stuart Highway and is accessed from the highway. The tenement hosts numerous station tracks.

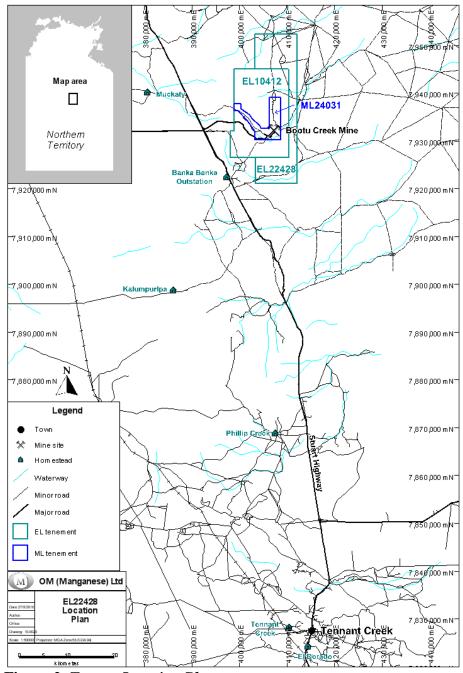


Figure 2. Tenure Location Plan

3. Geology

The exploration licence is located entirely within the Tomkinson Creek Group in the Ashburton Province of the Tennant Creek Inlier (Figure 3). The favourable manganese bearing horizon is located on the contact between the dolostone and siltstone units of the Attack Creek Formation (Pta) and the overlying sandstone of the Bootu Formation (Ptb).

A number of manganese deposits occur around the eastern and western limbs of the Bootu Syncline. Bedding dips along both limbs are typically around 30° , with local variations ranging from 15° to 45° .

The principal manganese mineralisation consists of strata-bound layers contained within dolomitic siltstone and medium grained sandstone. There is a marked increase in Mn grade towards the base of the layers. True thickness of the layers is typically 5-10m, but varies from 3m up to 12m.

The immediate foot-wall is formed by siltstone, generally hematitic. The immediate hanging-wall consists of a variable sequence of siltstones and sandstones, usually with hematite and minor manganese mineralisation. The sedimentary sequence generally coarsens upwards. The minerals present are an assemblage of manganese oxides and generally comprise a mixture of cryptomelane, psilomelane and pyrolusite.

The geology of the area surrendered in EL22428 is composed predominately of Bootu Formation sandstone and the Carmilly Formation, the two upper members of the Tomkinson Group. The Palaeozoic rocks are covered in part by Cenozoic alluvium, colluvium and aeolian sand. No known manganese mineralisation has been documented in the surrendered area.

4. Exploration Activity to end Year 8

Work carried out on the surrendered portion of EL22428 by OM (Manganese) Ltd for the period September 2002 to September 2010 comprised:

- purchase and interpretation of Aster multi-spectral data,
- satellite imagery acquisition,
- aerial geophysical survey (aeromagnetics and radiometrics),
- aerial photography, and
- RC drilling.

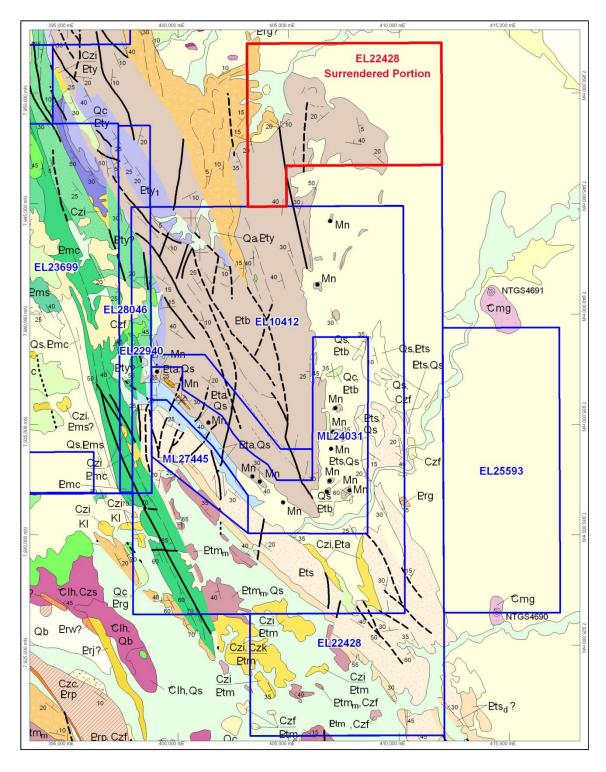


Figure 3. EL boundary and Geology from 1:250k Helen Springs sheet

4.1 Multi-spectral Investigation

Aster data/scenes were purchased over the entire Bootu Creek tenure, from Renner Springs in the north to Attack Creek in the south and were initially rectified by GeoImage Pty Ltd prior to initial interpretation by a consulting geologist Amit Eliyahu in October 2006 (Figure 4).

The technique has assisted manganese exploration at other locations such as Woodie Woodie in Western Australia. If demonstrated as a useful technique on the Bootu Creek tenure, then it could be followed up by more detailed survey by fixed wing aircraft.

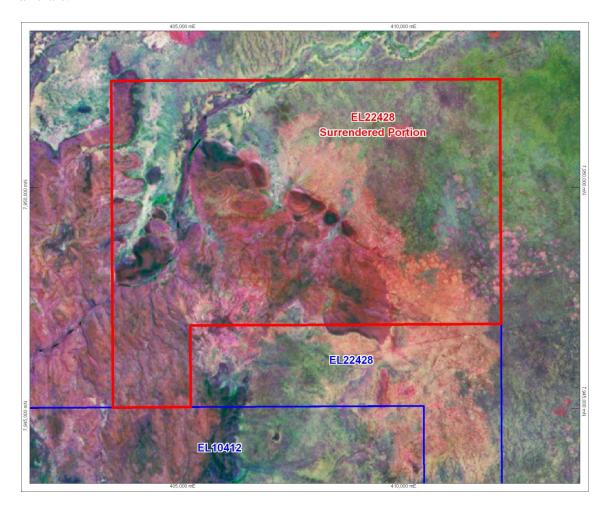


Figure 4. Aster Image with Reconnaissance Sample Points

4.2 Satellite imagery acquisition

In an effort to gain more detailed information about the location of tracks, fences, outcrop, other physical features of use to exploration, as well provide a more recent snap-shot of the current mine layout, a high resolution satellite image capture was commissioned to GeoImage Pty Ltd in Brisbane, Queensland. The satellite was tasked to acquire data over the entire area (598 km²) of EL10412, EL22428, and EL25593 as shown in Figure 5.

The QuickBird colour scene was produced from QuickBird 0.6m, 3-band pansharpened, data captured during July 2008. The dataset was orthorectified to GDA94/MGA53 datum/projection. The dataset is comprised of imagery dated 06 July 08 and 11 July 2008.

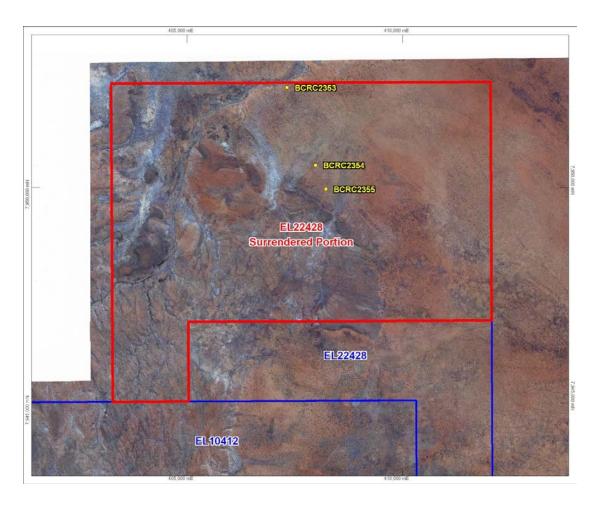


Figure 5. Quickbird satellite imagery captured over EL 22428 during the reporting period.

The dataset was formatted to ECW compression format and provided with an ALG and TAB file for opening within MapInfo GIS products. Additionally, the data was suppled in BIL format with associated header files.

The dataset was orthorectified using PCI OrthoEngine with cubic convolution methodology. XY control for the orthorectification was from OM (Manganese) Ltd.

4.3 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.

The total survey area was divided into two sections covering the grouped tenement holdings. EL22428 made up 8.3% (884 line km) of the total survey area.

All data captured during this survey was submitted as part of the EL23459 2008/2009 annual report.

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

4.3.1 Radiometric data

GPX Surveys supplied the final dataset as a located data file (.dat) as well as several ER mapper grids (.ers) and located image files (.tif) for K, U, Th, total count and ternary image.

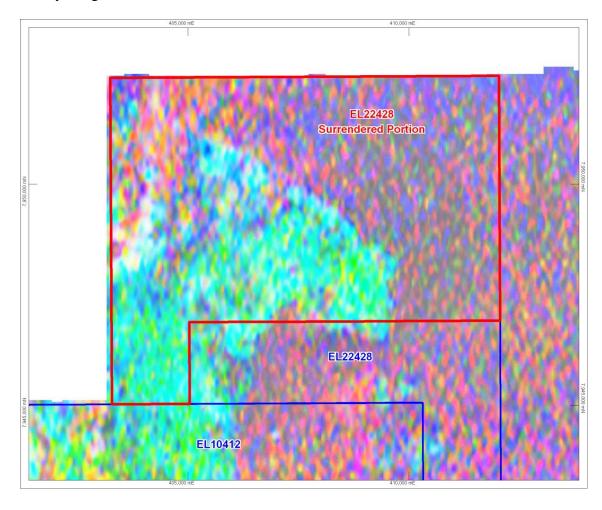


Figure 6. Ternary radiometric data across EL22428.

4.3.2 Aeromagnetic data

The aeromagnetic data was supplied as a located data file (.dat) as well as several ER mapper grids (.ers) and located image (.tif) files for TMI, TMI1VD, TMI2VD, TMIRTP, and RTP1VD.

The magnetic data (Figure 7) shows the extent of the Helen Springs Volcanics in both EL10412 and EL22428 as well as the boundaries of units buried by Quaternary sand in the northern part of EL22428.

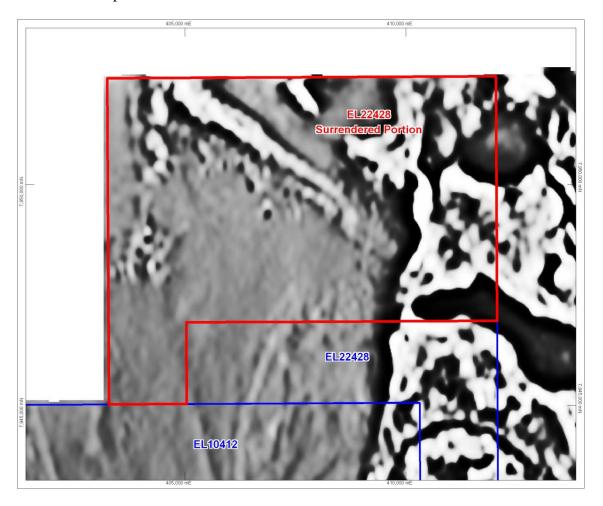


Figure 7. 1VDRTP magnetic image of EL22428

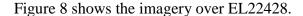
4.4 Aerial Photography

In April 2009 United Photo and Graphic services collected aerial photography over selected OMM tenement areas at a nominal scale of 1:20,000 (approximately 0.5m pixel size). Approximately 80% of EL22428 was covered by the aerial photography.

The data was passed on to Survey Graphics in Perth for processing. Alternative frames were orthorectified using 50 metre DEM and the frames were colour balanced and mosaiced seamlessly.

The data was used for planning the RC drilling program executed in August of 2009.

The final mosaiced image was supplied in ECW at 20:1 compression in the ML24031 2009 annual report.



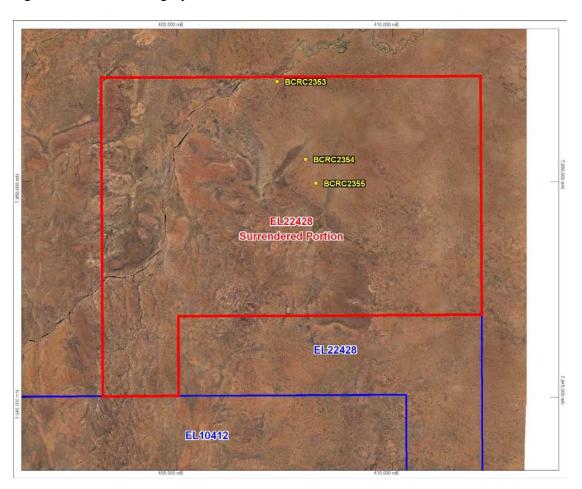


Figure 8. Image showing the extent of the 2009 aerial photography on EL22428 and recent RC drill hole locations.

4.5 RC Drilling Program

McKay Drilling were contracted to undertake a limited RC drilling program on EL22428 in August 2009. The RC drilling and sampling undertaken within the surrendered area is summarized below in Table 2.

Licence	No. of holes	Total metres drilled
EL22428	3	348

Table 2. RC drilling statistics.

Three holes (BCRC2353-2355) were drilled within the surrendered portion of EL22428 during the reporting period. These holes, whose relative location is shown in Figure 8, were 'stratigraphic' holes either designed to characterize magnetic anomalies or provide an indication of rock-type in the absence of a geophysical signature. No mineralization or prospective rock-types were intersected in the northern three holes and that portion of the EL was subsequently surrendered.